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UNITED STATES COPYRIGHT ROYALTY JUDGES The Library of Congress -----X IN THE MATTER OF: Docket No. DETERMINATION OF CABLE 14-CRB-0010-CD ROYALTY FUNDS (2010-2013)

OPEN SESSIONS

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1	UNITED STATES COPYRIGHT ROYALTY JUDGES
2	The Library of Congress
3	X
4	IN THE MATTER OF:)
5) Docket No.
6	DETERMINATION OF CABLE) 14-CRB-0010-CD
7	ROYALTY FUNDS) (2010-2013)
8	X
9	BEFORE: THE HONORABLE SUZANNE BARNETT
10	THE HONORABLE JESSE M. FEDER
11	THE HONORABLE DAVID R. STRICKLER
12	
13	Library of Congress
14	Madison Building
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16	Washington, D.C.
17	March 12, 2018
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19	9:05 a.m.
20	VOLUME XIII
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23	Reported by: Karen Brynteson, RMR, CRR, FAPR
24	
25	

1	APPEARANCES:
2	On behalf of Joint Sports Claimants:
3	ROBERT ALAN GARRETT, ESQ.
4	M. SEAN LAANE, ESQ.
5	DANIEL A. CANTOR, ESQ.
6	MICHAEL KIENTZLE, ESQ.
7	BRYAN L. ADKINS, ESQ.
8	Arnold & Porter Kaye Scholer LLP
9	601 Massachusetts Avenue, N.W.
10	Washington, D.C. 20001
11	202-942-5000
12	
13	IAIN R. McPHIE, ESQ.
14	Squire Patton Boggs LLP
15	2500 M Street, N.W.
16	Washington, D.C. 20037
17	202-626-6688
18	On behalf of Commercial Television Claimants:
19	JOHN I. STEWART, Jr., ESQ.
20	DAVID ERVIN, ESQ.
21	ANN MACE, ESQ.
22	Crowell & Moring LLP
23	1001 Pennsylvania Avenue, N.W.
24	Washington, D.C. 20004
25	202-624-2685

1	APPEARANCES (Continued):
2	On behalf of Program Suppliers:
3	GREGORY O. OLANIRAN, ESQ.
4	LUCY HOLMES PLOVNICK, ESQ.
5	ALESHA M. DOMINIQUE, ESQ.
6	ALBINA GASANBEKOVA, ESQ.
7	DIMA BUDRON, ESQ.
8	Mitchell Silberberg & Knupp LLP
9	1818 N Street, N.W., 8th Floor
10	Washington, D.C. 20036
11	202-355-7917
12	
13	On behalf of Public Television Claimants:
14	RONALD G. DOVE, Jr., ESQ.
15	DUSTIN CHO, ESQ.
16	ROBERT N. HUNZIKER, JR., ESQ.
17	Covington & Burling LLP
18	One CityCenter
19	850 Tenth Street, N.W.
20	Washington, D.C. 20001
21	202-662-4956
22	
23	
24	
25	

1	APPEARANCES	(Continued):
2	On behalf of	E Canadian Claimants Group:
3		L. KENDALL SATTERFIELD, ESQ.
4		Satterfield PLLC
5		1629 K Street, N.W., Suite 300
6		Washington, D.C. 20006
7		202-355-6432
8		
9		VICTOR J. COSENTINO, ESQ.
10		Larson & Gaston, LLP
11		200 S. Los Robles Avenue, Suite 530
12		Pasadena, CA 91101
13		626-795-6001
14		
15	On behalf or	f Settling Devotional Claimants:
16		ARNOLD P. LUTZKER, ESQ.
17		BENJAMIN STERNBERG, ESQ.
18		Lutzker & Lutzker LLP
19		1233 20th Street, N.W., Suite 703
20		Washington, D.C. 20036
21		202-408-7600
22		
23		
24		
25		

1	APPEARANCES (Continued):
2	On behalf of Settling Devotional Claimants:
3	MATTHEW J. MacLEAN, ESQ.
4	MICHAEL A. WARLEY, ESQ.
5	JESSICA T. NYMAN, ESQ.
6	Pillsbury Winthrop Shaw Pittman LLF
7	1200 Seventeenth Street, N.W.
8	Washington, D.C. 20036
9	202-663-8183
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
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1	PROCEEDINGS
2	(9:05 a.m.)
3	JUDGE BARNETT: Good morning. Please
4	be seated.
5	Are we beginning with Hartman this
6	morning?
7	MR. LAANE: Dr. Israel, Your Honor.
8	JUDGE BARNETT: Israel, okay. And
9	where is Dr. Israel? There he is.
10	MR. LAANE: He's right here. Joint
11	Sports Claimants call Dr. Mark Israel.
12	JUDGE BARNETT: Good morning.
13	THE WITNESS: Good morning.
14	JUDGE BARNETT: Please raise your
15	right hand.
16	Whereupon
17	MARK ISRAEL,
18	having been first duly sworn, was examined and
19	testified as follows:
20	JUDGE BARNETT: Please be seated.
21	DIRECT EXAMINATION
22	BY MR. LAANE:
23	Q. Good morning, Dr. Israel.
24	A. Good morning.
25	Q. Please introduce yourself to the

- 1 Judges.
- 2 A. I'm Mark Israel. I'm an economist. I
- 3 -- local in D.C. I work for a firm called
- 4 Compass Lexecon, where I'm a senior managing
- 5 director.
- 6 Q. And could you just give us an overview
- 7 of your educational background?
- 8 A. Sure. So I'm -- I have a Bachelor's
- 9 degree from Illinois Wesleyan University, a
- 10 school in central Illinois, in math and
- 11 economics. Then went on and got a Master's
- degree in economics at the University of
- Wisconsin, worked for a few years, and then
- went and got a Ph.D. in economics from Stanford
- University, which I finished in 2000.
- 16 Q. And do you have any areas of
- 17 specialization within the field of economics?
- 18 A. Yeah, generally, I'm an industrial
- 19 organization economist. So I work on
- 20 competition in markets and pricing matters. I
- also consider myself an applied econometrician.
- 22 As far as areas of focus, a great deal
- of my work has been on television, media
- 24 generally, telecom-type industries, although I
- 25 work on a wide variety of industries.

- 1 Q. You mentioned applied econometrics.
- 2 Do you personally have experience designing and
- 3 conducting regression analyses?
- 4 A. Yeah, I do it all the time. It's
- 5 probably the single best description of what I
- 6 do for a living.
- 7 Q. And have you previously served as an
- 8 expert in litigation matters?
- 9 A. Several times, yes.
- 10 Q. And can you just give us a couple
- 11 examples of those?
- 12 A. Sure. So I've testified in federal
- 13 court three times in the last four years on
- 14 merger trials. One for the government, two for
- the parties. I've worked on a variety of state
- 16 court matters, class certification, damages,
- 17 several arbitration matters.
- 18 Q. And were you qualified as an expert in
- 19 those proceedings?
- 20 A. Yes, I was.
- Q. How long have you been with Compass
- 22 Lexecon?
- 23 A. Just over 12 years.
- Q. And what did you do professionally
- 25 before joining Compass Lexecon?

- 1 A. So after leaving Stanford, I went to
- 2 Northwestern University, where I taught in the
- 3 Kellogg School of Management. I taught
- 4 business strategy and economics to MBA
- 5 students, Ph.D. students at Northwestern.
- 6 O. And do you continue to do some
- 7 teaching?
- 8 A. Yeah. I still do some sort of
- 9 executive education teaching or various
- 10 programs, kind of on an intermittent basis. I
- 11 really enjoy teaching, so I try to get back to
- 12 it when I -- when time permits.
- 13 O. And is that also with the Kellogg
- 14 School?
- 15 A. Yes.
- 16 O. Have you published in the
- 17 peer-reviewed economics literature?
- 18 A. Yes, I have. I think I have between
- 19 10 and 15 published papers in peer-reviewed
- 20 journals, American Economic Review, the RAND
- Journal of Economics, the Review of Network
- 22 Economics, and some others.
- 23 Q. And then in addition to publishing in
- the peer-reviewed literature, have any journals
- 25 asked you to serve as a peer reviewer to

- determine whether other authors' works are
- 2 worthy of publication?
- 3 A. It's usually referred to as being a
- 4 referee. And I do it a few times a year for
- 5 similar journals to the ones I mentioned I
- 6 publish in.
- 7 Q. Okay.
- 8 MR. LAANE: Your Honors, Joints Sports
- 9 Claimants offer Dr. Israel as an expert in
- 10 economics, industrial organization, and
- 11 econometrics.
- JUDGE BARNETT: Hearing no objection,
- 13 Dr. Israel is so qualified.
- 14 MR. LAANE: Thank you, Your Honor.
- 15 BY MR. LAANE:
- 16 O. Dr. Israel, what was your assignment
- in this proceeding?
- 18 A. Initially, it was to review the
- 19 results of the Bortz survey and then, in
- 20 particular, to see if those results were
- 21 corroborated by marketplace evidence on the
- 22 prices paid for content and the value on
- 23 content.
- Over time, it also included reviewing
- 25 testimony prepared and presented by other

- 1 experts and giving my reactions to that
- 2 testimony.
- 3 Q. Okay. And, Dr. Israel, in front of
- 4 you, you should have a binder containing
- 5 Exhibits 1003 and 1087, which have already been
- 6 admitted into evidence.
- 7 Do you have that there in front of
- 8 you?
- 9 A. Yes.
- 10 Q. Okay. And is Exhibit 1003 your
- 11 written direct testimony?
- 12 A. Yes.
- 13 Q. And is 1087 your written rebuttal
- 14 testimony?
- 15 A. Yes.
- 16 Q. Okay. Do you have any corrections to
- 17 your written testimony?
- 18 A. There was one very small correction,
- 19 just discovered in reviewing things for the
- 20 proceeding. In Table V-5, or Roman V-5, on
- 21 page 26 of my original testimony, there was a
- very small error in one cell in the spreadsheet
- 23 that causes the total household viewing hours
- for the non-JSC content to go down by a very
- 25 small amount.

- 1 But it has no effect on -- changes
- things in the sort of math in the table at the,
- 3 you know, second decimal place. It has no
- 4 effect on anything substantive.
- 5 Q. Okay. And with that correction, do
- 6 you declare Exhibits 1003 and 1087 true and
- 7 correct?
- 8 A. Yes.
- 9 Q. All right. So you told us you were
- 10 asked to evaluate whether marketplace behavior
- 11 corroborates the results of the Bortz survey.
- 12 How did you go about exploring that question?
- 13 A. A couple different ways. The first
- one was to use regression analysis.
- 15 Intentionally, I relied on a regression
- 16 analysis quite similar to what Dr. Waldfogel
- 17 had used in the last proceeding and Dr. Rosston
- 18 before him. I wanted to stick closely to that
- 19 method so that, you know, the Judges could see
- 20 what that method that has been used and
- 21 indicated was useful before, what that would
- 22 apply to the current data.
- 23 So that's a regression that relates
- 24 the viewing or the acquisition or the -- the
- viewing of or the showing of various minutes of

- different programming by CSOs. It relates to
- 2 -- those minutes to the dollars paid. So I
- 3 looked at a regression of that form.
- And then I also looked at what I call
- 5 a cable content analysis that looks at cable
- 6 networks, TBS, TNT, and the top 25 networks,
- 7 and looks at what they pay for various types of
- 8 content, sports content and other content, what
- 9 they pay relative to how many hours of that
- 10 type of content they show and how many hours
- 11 are viewed.
- 12 O. Okay. And we'll go into some of the
- details in a minute, but, first, just what were
- 14 your bottom-line conclusions on whether or not
- 15 those studies corroborated the Bortz survey
- 16 results?
- 17 A. I found they corroborated them very
- 18 closely, strikingly closely in my experience in
- 19 doing this kind of work with different methods.
- 20 The regression analysis found relative
- 21 valuations that were, you know, quite similar
- 22 to Bortz.
- 23 And the cable content analysis found,
- 24 you know, different types of content had
- 25 different value relative to how many minutes of

- 1 it were shown and that the value on sports
- 2 content, in particular, was quite a bit higher,
- 3 as the Bortz survey had found.
- Q. Okay. And let's take a look at Figure
- 5 V-1 at page 22 of your written testimony.
- And, Geoff, if you could put up slide
- 7 2, please.
- 8 And what is this graph showing us,
- 9 Dr. Israel?
- 10 A. So this is summarizing the comparison
- of my regression results to the Bortz survey
- 12 results, as I just mentioned. So this is a
- 13 good summary of my basis for saying that the
- 14 regression corroborates the Bortz survey.
- 15 You can see that the ranking -- so the
- 16 blue bars are my regression results. The red
- 17 bars are the Bortz results. Each expressed --
- 18 each expressing the total value, you know, as a
- 19 percentage out of 100.
- 20 So you can see the -- you know, for
- 21 sports in particular, the percentage is very
- 22 similar. And then the rankings across the
- various categories are quite similar and
- 24 certainly similar percentages for the -- for
- 25 the top categories.

1	JUDGE STRICKLER: Excuse me, counsel.
2	Good morning, Dr. Israel.
3	THE WITNESS: Good morning.
4	JUDGE STRICKLER: How are you?
5	THE WITNESS: Good.
6	JUDGE STRICKLER: When you did your
7	regression, that's the results summarized in
8	this bar chart, were you already aware at the
9	time you began your regression of the results
10	of the Bortz survey or did you do your
11	regression blind and then compare it to the
12	Bortz survey?
13	THE WITNESS: My recollection is that
14	when I did the regression initially, I was not
15	aware of the results of the Bortz survey.
16	Certainly, I became aware of them over time.
17	But I designed the regression similar to what
18	Dr. Waldfogel had done with just a couple
19	changes, all independent of the Bortz survey.
20	And, you know, there has been a main
21	specification throughout that hasn't changed,
22	so I'm pretty sure that specification was
23	designed before I had seen any Bortz results.
24	And the basic specification, with a
25	couple modifications from what Dr. Waldfogel

1	has done, has stayed the same throughout.
2	JUDGE STRICKLER: So you're pretty
3	sure you hadn't seen the Bortz survey first but
4	you're not completely certain?
5	THE WITNESS: I'm certain I had seen
6	it when I designed the initial specification.
7	I just as far as when I'm pretty my
8	recollection of what happened is I'm certain we
9	designed the specification before having seen
10	any results because I got the Waldfogel
11	testimony, figured out a couple very minor
12	changes to make, and I hadn't seen any Bortz
13	results at that point.
14	I don't the only thing I don't
15	recall is exactly when in the process the Bortz
16	stuff first came in. But, certainly, the
17	design of the specification was done before I
18	had seen any Bortz results.
19	JUDGE STRICKLER: Were you finished
20	with the results of the regression before you
21	saw the Bortz results?
22	THE WITNESS: Yeah, certainly the
23	first runs of the regression that gave the
24	coefficients were done before I had seen the
25	Bortz results, yes. As we'll go through, there

- 1 are a couple of sensitivities in the back that
- 2 I added to check things, and it may be that I
- 3 had seen the Bortz results and then did those
- 4 as I went along, but certainly the first
- 5 specification and the first set of coefficient
- 6 results in that first regression was all done
- 7 based on Waldfogel before I had seen the
- 8 updated Bortz results.
- JUDGE STRICKLER: Thank you.
- 10 JUDGE FEDER: Dr. Israel, is it fair
- 11 to say that there's a reasonably close
- 12 correlation between your results and the Bortz
- 13 survey for the top three categories, sports,
- 14 Program Suppliers, and CTV, but that
- 15 correlation breaks down somewhat as you get
- into the smaller categories?
- 17 THE WITNESS: I think it's fair to say
- 18 that correlation is closer for the top
- 19 categories. I mean, I think the way I would
- 20 describe it is it's very -- it's very close,
- even quantitatively, for the top three. It's
- 22 close in ranking overall, but in -- the numeric
- comparisons, certainly, is less close at the
- low end.
- 25 I will say in sort of regression work

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1 I've done, I've done a fair amount of
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- 2 regression work where you're valuing the
- 3 quality of -- of different products or you're
- 4 valuing different components. I've done some
- 5 work on automobiles where you're valuing the
- 6 components of an automobile. And in my
- 7 experience, when you get sort of toward the
- 8 lower end, the components with lower value, the
- 9 regression results can differ a little bit more
- 10 from what you see from other sources of
- 11 evidence.
- 12 If you just see fewer people
- 13 purchasing a given -- like in a car, fewer
- 14 people have a different, a certain package they
- 15 add. Certainly, that package has some value,
- 16 but pinning it down precisely in a regression,
- in my experience, it's pretty common that you
- 18 get a little more variation at the low end.
- 19 JUDGE FEDER: Thank you.
- 20 BY MR. LAANE:
- Q. And we'll come back to a bit more on
- 22 the regression in a minute.
- For the moment, Geoff, if you could go
- to slide 3, please.
- 25 And, Dr. Israel, this is Figure V-3,

- of page 29 of your written testimony. And what
- 2 does this reflect?
- 3 A. So this is a summary of what I
- 4 referred to as the cable content analysis. And
- 5 this is for TBS, in particular. So, obviously,
- 6 TBS used to be a super-station that was part of
- 7 these proceedings. It's now a cable network
- 8 that shows a mixture, you know, mostly shows
- 9 non-JSC content but has a little sports
- 10 content.
- 11 And this is a summary of how much TBS
- pays per hour of sports programming versus how
- much it pays per hour of non-sports
- 14 programming, showing that, obviously, the cost
- of the sports programming is much higher.
- 16 Q. Now, what relevance does that have to
- 17 your assessment of the Bortz survey results?
- 18 A. I mean, really I take two things from
- 19 it, both of which are consistent with what the
- 20 Bortz survey found. One is that an hour is not
- 21 an hour. I mean, there's differences in values
- of an hour of different types of programming.
- 23 And, in particular, obviously, the
- 24 Bortz survey finds that, you know, a much
- 25 larger percentage of the value of the content,

- 1 say, goes to sports content than is reflected
- 2 in the number of hours. So that it, you know,
- 3 gets a much higher valuation of sports than the
- 4 number of hours would reflect.
- 5 And that's consistent and confirmed by
- 6 what -- you know, what cable networks like TBS
- 7 are paying when they put together bundles of
- 8 content.
- 9 Q. Thank you.
- 10 Geoff, you can take that down.
- 11 Turning back to the regression, are
- the royalty rates for distant signals set by
- 13 law?
- 14 A. Yes.
- 15 O. How can the payment of royalties in a
- 16 regulated market shed light on the issue of
- 17 relative value that's in front of the Judges?
- 18 A. It's really the fact that the CSOs
- 19 choose what content to carry. So that the
- 20 royalty schedule is set by law. So the price
- 21 is effectively set by law.
- But the decision of what to carry,
- given those prices, is a decision of the CSOs.
- 24 So you can learn based on the choices people
- 25 are making. You can see what minutes of

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1 different types of content they're -- they're
```

- 2 airing and how that -- and how that relates to
- 3 what they pay.
- I should note -- you know, this was
- 5 interesting to me. I've done some work in my
- 6 own career. I've done a fair bit of work on
- 7 the insurance industry, some of which was
- 8 designed -- my dissertation work, in fact,
- 9 designed to indicate what parts of insurance
- 10 policies people value.
- 11 And that was a setting where the
- 12 prices were set by regulation. And the study
- 13 was what decisions people make given those
- 14 prices. So I think it's -- you know, it's
- 15 reasonably common to try to learn based on the
- 16 decisions people make when facing regulated
- 17 pricing.
- 18 Q. And, Geoff, if you could bring up
- 19 slide V- -- slide 4, Table V-1.
- 20 First, just generally, Dr. Israel,
- 21 what does this table contain?
- 22 A. So this is the results of my
- 23 regression analysis.
- Q. Okay. And we see at the top the
- 25 minutes of various categories of programming.

- 1 And then listed below are those control
- 2 variables?
- 3 A. Correct. So this is -- discussing a
- 4 minute ago, the base -- that's the
- 5 specification of my basic regression, which is
- 6 quite similar to what -- to what Dr. Waldfogel
- 7 and Dr. Rosston had used.
- 8 So the basic setup is you're
- 9 explaining the royalty payments. That's what's
- 10 called the left-hand side or dependent
- 11 variable. And it's being explained based on
- 12 how many minutes of the different types of
- 13 programming people, you know, show.
- 14 And then control variables, I think of
- the control variables largely to capture the
- other part of the formula for how much people
- 17 pay. It's minutes times -- you know, basically
- 18 times the size of the system. And so the other
- 19 control variables capture the size of the
- 20 system as well as things like the -- the
- 21 features of the payment schedule, the minimum
- 22 payment and the 3.75 percent royalty rate.
- Q. Now, you mentioned the minimum payment
- 24 and we can see there's an indicator variable
- listed here for payment of the minimum fee.

- 1 Did you see that Dr. Gray suggested in
- 2 his rebuttal that you should have simply
- 3 discarded minimum fee systems from the data
- 4 set?
- 5 A. I did see that, yes.
- 6 Q. Why did you retain those systems in
- 7 the data set?
- 8 A. I mean, they're systems that are
- 9 making choices about what to carry. They're
- 10 part of the overall data. So, in general it's,
- in my opinion, better to use all the data,
- 12 particularly when the data are informative,
- when you see even the systems making the
- 14 minimum payment are choosing what to carry. So
- we can relate what they choose relative to what
- 16 they pay.
- 17 And then maybe even most importantly
- in a regression, the purpose is to compare what
- 19 different systems carry and what they pay and
- 20 so it's important to include all the systems in
- 21 the regression so that you can compare those
- 22 choices across the full set of systems.
- 23 Q. Did Dr. Waldfogel include minimum fee
- 24 systems in his regression?
- 25 A. Yes.

- 1 Q. Looking back at the regression results
- 2 in your table, can you just tell us, for
- 3 example, if we look at the number 4.836 for
- 4 Sports or 0.469 for Program Suppliers, what
- 5 those numbers are and what they mean?
- A. Yeah. So 4.836 -- well, each of them
- 7 is what's called the coefficient in the
- 8 regression analysis. And then the way to
- 9 interpret those two, in particular, is 4.836
- 10 would say, for every minute of sports
- 11 programming that we see being carried, the
- 12 payment that the CSO is making, indicating, you
- 13 know, the value they must put on the content.
- 14 That payment is 4.836 dollars for every minute
- of sports programming.
- 16 The .469 says, for every minute of
- 17 Program Suppliers' programming, we see a
- 18 payment of, you know, just roughly 47 cents.
- 19 And so you can see that for different minutes
- 20 of different types of programming listed
- 21 throughout, there are different sort of average
- 22 payments. Again, all of this is controlling
- for the control variables and then looking at
- 24 the payments given a minute of that type of
- 25 programming, controlling for the other

- 1 variables. JUDGE FEDER: Dr. Israel, how do we 2 interpret the negative coefficients for 3 Canadian, Devotional, and network programming? 4 THE WITNESS: So, I mean, the simple 5 regression answer is it says that for a CSO of 6 a particular size, when we see it, you know, 7 carrying Canadian or Devotional or network 8 programming, its total payments are slightly 9 smaller than we would expect for a typical CSO 10 of that size. 11 So it's associating carriage of that 12 program with slightly smaller payments than you 13 would expect for a CSO of that size. 14 I would say, you know, as an 15 economist, my interpretation of those -- of 16 those negative coefficients is slightly 17 different across the categories. For network 18 programming, and maybe we'll talk more about 19 it, but for network programming, it's obviously 20
- But the network programming is, you know, from a distant signal, is often duplicative of network programming that the

control variable.

not compensable here. I'm using it as a

21

```
system would have from local stations.
1
      wouldn't surprise me as an economist that if
2
      somebody carries a distant network affiliate,
3
      they really are carrying it for something other
 4
      than the network programming. And so the
 5
      network programming might be something they
      would rather not have because they have that
 7
      from another source.
 8
               For Canadian and Devotional, frankly,
 9
      this relates to the question you asked me
10
               I think sometimes when you have lower
11
12
      value, you know, programming that isn't carried
      quite as often, the regression sees in the data
13
14
      that the people carrying that are paying
      somewhat less. And so it gives a negative
1.5
      coefficient.
16
               My own view is, obviously, those
17
      sources of programming have some value here.
18
      So I wouldn't take the regression -- I would
19
      take the regression to say the value on that
20
      programming is relatively smaller, but I
21
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24 And that's why it's, in my view, 25 useful to use these things to corroborate

or even necessarily zero.

22

23

wouldn't say it's literally negative or zero,

- 1 something like Bortz. So we see smaller
- 2 numbers there. We see lower payments there.
- 3 But I think Bortz survey correctly captures
- 4 that there's some positive value on that
- 5 programming.
- 6 BY MR. LAANE:
- 7 Q. Geoff, could you go to slide 5,
- 8 please.
- 9 So, Dr. Israel, after you've computed
- 10 those coefficients, you know, then how did you
- 11 go about determining the allocation shares for
- 12 each program category?
- 13 A. All right. So for the categories that
- 14 are included here that are compensable, so
- 15 leaving out network as we just discussed, the
- 16 basic methodology is laid out on this table.
- 17 It's take the value per minute, that's in
- 18 column B here, which we were just looking at,
- and then multiply it by compensable minutes.
- 20 As you see, in column C, it mentions
- 21 prorated minutes. So that's covered in my
- 22 written testimony. But the minutes are
- 23 prorated based on the subscriber groups that
- 24 actually receive it. So if only half of the
- 25 subscribers at a given CSO receive the minutes,

- 1 that minute would count half as much. But it
- 2 basically takes the value of the minute times
- 3 the number of minutes to give an overall value
- 4 of minutes.
- 5 And as you can see, as we were just
- 6 discussing, for Devotional and Canadian, I
- 7 don't give them negative value. I give them
- 8 zero under the regression. But it -- so it
- 9 does that multiplication, it comes up with a
- value per minutes, and it then converts that in
- 11 column E into the percentage shares.
- 12 Q. Okay. Now, we've already heard
- 13 testimony that not all of the programming on
- 14 WGNA was compensable in this period. How at
- 15 all did you address that in the regression?
- 16 A. Well, so the regression itself --
- 17 similar to what we just said for network
- 18 programming, the regression itself includes all
- 19 the minutes because the regression is capturing
- 20 the decision that a CSO makes. When a CSO
- 21 takes WGNA, it's taking all of the minutes.
- 22 That's what it has on its programming.
- 23 But, obviously, for purposes of this
- 24 proceeding, only a subset of those minutes are
- 25 compensable. So it takes those -- the

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1 coefficients that come out of the regression
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- and multiplies them only by the compensable
- 3 minutes. So, basically, it's taking the
- 4 implied price but multiplying it only times
- 5 what you have to pay for.
- 6 My understanding is the other minutes
- 7 are covered through other negotiations between
- 8 CSOs and WGNA. So they would be compensated in
- 9 another way. So here I just include what is
- 10 relevant in my understanding to this
- 11 proceeding.
- 12 JUDGE STRICKLER: Excuse me,
- 13 Dr. Israel. In the first column of figures,
- 14 it's called value of an additional minute. Is
- 15 additional, in fact, the accurate way to
- 16 describe that, that is to say as a marginal
- 17 minute as an economist might say it, or is it
- 18 more in the nature of an average minute?
- 19 THE WITNESS: Yeah, I think you're
- 20 probably right. It's probably more an average
- 21 -- average minute that you've captured from
- 22 that content, I think. It's -- it's -- because
- this is really taking the average value across
- 24 the different CSOs.
- 25 And the CSOs take the content in a

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1 bucket, right? They can't just literally take
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- one more minute. So I think it's the average
- 3 sort of incremental minute, but that's an
- 4 average across a bucket of minutes that you get
- 5 when you take a signal.
- JUDGE STRICKLER: Because from an
- 7 economic point of view, if the value of a
- 8 marginal minute of sports programming was so
- 9 much higher than everything else, you would
- 10 never take the other programming; you would
- take the one that gives you a greater marginal
- 12 value and -- on the margin. You would continue
- to use -- to air sports programming until the
- 14 marginal values were equal, right?
- 15 THE WITNESS: Right, or in a -- in a
- 16 marketplace, there would be negotiations over
- 17 the prices of these things that would cause the
- 18 price of sports to be higher to reflect that,
- 19 which is a --
- JUDGE STRICKLER: Then you would be
- 21 worried about the ratio of the price to the
- 22 revenue that you could produce and try to
- 23 equalize that ratio until -- and when they were
- 24 equal --
- 25 THE WITNESS: Correct.

1 JUDGE STRICKLER: -- then you would

- 2 have your marketplace result?
- 3 THE WITNESS: I agree with that
- 4 generally. I mean, the way I think about these
- 5 results is the way this particular marketplace
- 6 works, at least for other types of networks, I
- 7 work on this stuff a lot, is there is a
- 8 negotiation between the network and the CSO,
- 9 right? And so if the CSO had ten times as much
- 10 value for sports than Program Suppliers, then
- 11 you would expect the negotiated price to be ten
- 12 times as high. That's how I interpret these
- numbers and why they can be used to understand
- 14 what would happen in a free market.
- JUDGE STRICKLER: Thank you.
- 16 BY MR. LAANE:
- 17 Q. Geoff, if you could go to slide 7,
- 18 please.
- 19 And, Dr. Israel, I guess this is -- is
- 20 this a tabular form of the same comparison we
- 21 were looking at before between the Bortz
- 22 results and your regression results?
- 23 A. Yes.
- 24 O. And we can see in the table the Bortz
- 25 survey covers 2010 through 2013 while your

- 1 regression uses data from 2010 through 2012.
- 2 Why doesn't your regression include
- 3 2013 as well?
- 4 A. It sort of goes back to the earlier
- 5 conversation about how early I started working
- on this stuff. So when I first started working
- 7 on the regression, the proceeding, as I
- 8 understand it, was covering 2010 through 2012.
- 9 It was later extended to include 2013.
- 10 Because the way I approached this
- 11 problem throughout was ultimately to -- to see
- if the regression results corroborated the
- 13 relative values in the Bortz survey, I
- 14 ultimately decided I could check 2010 to 2012
- 15 versus 2010 to 2012 or '13 in Bortz and check
- the corroboration so I didn't add the
- 17 additional year.
- 18 Q. Okay. And have you reviewed the
- 19 regression study that was submitted by
- 20 Dr. Crawford in this case?
- 21 A. I mean, yes, I've read his submitted
- 22 testimony.
- Q. Okay. And does Dr. Crawford's
- 24 regression shed any light on whether adding
- 25 2013 to your regression likely would have made

- 1 any material difference?
- 2 A. Well, Dr. Crawford does include 2013.
- 3 And I note that his 2013 results are consistent
- 4 with his 2010 through 2012 results. And
- 5 they're also consistent, you know, generally
- 6 consistent with the numbers in the Bortz
- 7 survey. And generally consistent with my
- 8 numbers. So it doesn't appear that the
- 9 addition of 2013, you know, had any material
- 10 effect.
- 11 Q. Okay. If you could turn for a minute
- 12 to page C-5 in Appendix C of your written
- 13 direct testimony.
- 14 A. C-5. Yes.
- 15 O. And this refers to your main model, as
- 16 well as sensitivities. What does sensitivities
- 17 mean?
- 18 A. I mean, sensitivity is a common term
- in econometrics to say you have a main model
- that's your main specification. Often you'll
- 21 run, you know, a few other versions that have
- 22 relatively small changes to your main
- 23 specification, just to -- you know, check to
- 24 make sure the results are not particularly or
- 25 overly sensitive to small changes.

1 Q. And, Geoff, could you bring up slide

- 2 9, please.
- 3 Dr. Israel, this is Table C-I-3 from
- 4 page C-6. And does this table show us your
- 5 sensitivities?
- 6 A. Yes.
- 7 Q. So column 1 is, I guess, the main
- 8 model we've been looking at, and 2, 3, and 4
- 9 are the sensitivities?
- 10 A. That's correct.
- 11 Q. Okay. And we can see for your main
- model and most of these sensitivities, the
- 13 coefficients for all the program categories are
- 14 statistically significant, but column 3, DMA
- 15 fixed effects sensitivity, there most of them
- 16 are not statistically significant.
- 17 Does that have any impact one way or
- 18 another on your conclusions about your
- 19 regression?
- 20 A. No. Just to make sure we're all on
- 21 the same page here, the little stars -- for
- 22 those who don't read regression tables every
- 23 day, the little stars next to the coefficients
- 24 are indicators of statistical significance.
- 25 Statistical significance is ultimately

- a measure of -- sort of a precision of the 1 estimate, how certain we are that the estimate is different from zero. 3 So if you go to column 3 with what's called DMA fixed effects, what that means is 5 that regression has added a separate, sometimes called a dummy variable or an indicator 7 variable. It has added a separate variable for 8 every different DMA. 9 So it's entirely controlling for all 10 of the variation across DMAs. That's adding 11 12 lots and lots and lots of variables to the model. And when you do that, you're going to 13 get less statistical significance on the 14 That's common in a sensitivity coefficients. 15 analysis like this. 16 What I really check for is, you know, 17 for things like sports, you know, which 18 19 obviously I focused on to some degree, you know, is the number of the coefficient 20
- regression? So it's not something -- you know, you're going to see insignificance when you do a check like this. What you're really looking for is does the actual coefficient change but

21

estimates similar to what we see in the base

- in a way that would change your conclusion?
- 2 Q. Okay. Now, if you could just flip
- 3 over in your notebook to the tab for your
- 4 rebuttal, Exhibit 1087, and I wanted to ask you
- 5 about Figure 1 at page -- at page 6.
- And, Geoff, if you could bring up
- 7 slide 10, please.
- 8 And what is this graph showing us,
- 9 Dr. Israel?
- 10 A. It just adds the -- Dr. Crawford's
- 11 regression results, which, obviously, you know,
- 12 I first saw in his written testimony. So it
- 13 added those results to the comparison that we
- 14 showed earlier for my results versus the Bortz
- 15 survey.
- 16 And you can see, you know, it's
- actually quite similar to what we said before.
- 18 There is close correlation in the rankings.
- 19 There is close correlation in the values for
- the top categories. There's an agreement on
- 21 what the bottom three categories are.
- 22 So it's -- it's very much confirmatory
- of the match that I saw between my results and
- 24 the Bortz survey.
- Q. Okay. And did you have any role at

- all in the design or conduct of Dr. Crawford's
- 2 regression?
- 3 A. No, not at all.
- 4 Q. And did he have any involvement in
- 5 your regression?
- A. No. We didn't speak about any of this
- 7 or have any interaction.
- 8 Q. Geoff, you can take that down now.
- 9 I wanted to move now to the second
- 10 study you told us about, your analysis of the
- 11 payments made by cable networks. And I think
- 12 you said you referred to those as your cable
- 13 content analysis.
- 14 A. Yes.
- 15 Q. Okay. And, Geoff, could you bring up
- 16 slide 11, please.
- 17 Dr. Israel, can you just walk us
- 18 through this and generally describe the
- 19 methodology of your cable content analysis?
- 20 A. Sure. I'll try to make it simple.
- 21 There's a lot of numbers on this page.
- 22 So I think easiest is just to walk
- 23 across the column. So this is looking at TBS
- 24 and TNT, two cable networks. I mean, to me
- 25 they are particularly interesting cable

- networks because they are put -- they put 1 together bundles of content. Obviously, trying 2 to find content that is valuable to -- to CSOs 3 and ultimately subscribers of CSOs. And, you know, their content is -- is -- has some sports 5 content but not that much. And that's what 7 gets summarized. So in column A, you can see the -- the 8 total number of hours of sports content shown 9 on TBS and TNT. So for TBS, it's that 684 next 10 to the JSC number. 11 And then you can see the 12 total number of hours of non-JSC content, just making up the rest of the hours. So you can 13 see that JSC hours make up just under 2 percent 14 of the 1.95 percent of the total hours. 15 Column B then adds a viewing dimension 16 to the numbers. So HHVH -- I think these 17 numbers have been used in previous iterations 18 of the proceeding, but HHVH stands for 19 Basically, that just 2.0 household viewing hours. weights each of the hours of each program by 21 how many households were watching the program. 22
- 25 And so you can see the number for JSC

the -- to the programming.

So it's sort of applying a ratings number to

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and non-JSC. And the JSC then makes up about 5

- 2 and a half percent of viewing. So somewhat
- 3 more viewing per hour on JSC that brings that
- 4 viewing number up.
- 5 But then when you go to the
- 6 expenditures number, you know, as is well-known
- 7 from my work in the industry generally, that
- 8 the cost, the amount being paid for the sports
- 9 content is substantially higher. So in the
- 10 case of each TBS and TNT, it's, you know, in
- 11 the 44 to 45, 46, mid-40s percentage. So you
- can see 44.4 for TBS and 45.46 for TNT.
- 13 And, again, that's -- that's
- 14 consistent with, you know, my general
- understanding from work in the industry that
- 16 these networks pay -- you know, nearly half of
- 17 their programming expenditures are on sports
- 18 content.
- And so the bottom line then is just
- 20 that these networks are paying substantially
- 21 more per hour of -- of programming or per hour
- of viewing for sports content than for
- 23 non-sports content.
- Q. So, for example, if we look at that
- 25 figure 40.11 under column D, what does that

- 1 indicate?
- 2 A. So it's easier just to walk down the
- numbers and, you know, get to the 40.1. So the
- 4 1.5 million that's there, that says that the
- 5 cost to TBS of an hour, per hour of sports
- 6 programming, what it pays per hour of sports
- 7 programming, it shows is 1.5 million.
- 8 What it pays per hour of non-sports
- 9 programming, it shows is 37,581. And so the
- 10 40.11 says an hour of sports programming costs
- 11 TBS 40 times as much as an hour of non-sports
- 12 programming.
- 13 Again, the key here is it's
- 14 consistent, I think, with what is generally
- 15 known in the industry, is just, per hour, the
- 16 sports programming is substantially more
- 17 expensive.
- 18 Q. Okay. And can you explain the 13.66
- 19 in column E?
- 20 A. So that's the same basic calculation.
- 21 It's just now it's what it costs per household
- 22 viewing hour, so not just per hour shown, but
- 23 per household. So think of it as -- take a
- 24 household that watches a show for an hour, what
- 25 are we spending per -- per such household

- viewing hour?
- 2 So you can see it's -- it's 84.5 cents
- 3 for the JSC programming. It's just over 6
- 4 cents for the non-JSC programming. So it's
- 5 costing TBS 13.66 times as much.
- And, again, what's most important to
- 7 me here is sort of the direction of the
- 8 effects. You're just -- you're seeing
- 9 substantially more being spent per hour shown
- 10 or viewed for sports programming than
- 11 non-sports programming.
- 12 Q. Okay. So we've been looking here at
- payments by -- and not to have you go through
- them all, but I take it the figures for TNT are
- then shown in the lower half of the chart?
- 16 A. That's correct. And they are similar.
- 17 The ratios are slightly lower, but, again, my
- 18 key takeaway is, you know, by large amounts,
- 19 the cost per hour of sports programming is
- 20 higher.
- 21 And, again, not surprising, I think
- this is generally recognized in the industry.
- Q. Okay. So we've been looking here at
- 24 payments by cable networks. In paragraph 51 of
- 25 your written direct testimony at page 30, you

- 1 discuss the fees that cable systems pay to
- 2 carry cable networks.
- And did you help prepare a slide
- 4 summarizing those data?
- 5 A. Yes.
- 6 Q. Okay. Geoff, if you could put up
- 7 slide 15, please.
- And please explain these numbers and
- 9 their significance to your analysis.
- 10 A. So this is going back to CSOs paying
- 11 for networks, which is, you know, similar to
- 12 CSOs paying for the distant signals in this
- 13 proceeding.
- 14 So what I wanted to do here was just
- 15 compare CSOs pay what's called affiliate fees
- in the industry. That's the cost they pay per
- 17 subscriber, per month. They have a price like
- 18 that for basically every cable network.
- 19 So I wanted to compare the price that
- 20 they pay for the -- for the cable networks that
- do have JSC content or don't, just as one more
- 22 indicator of what these payments look like in
- 23 the industry.
- 24 So you can see that the -- you know,
- 25 and obviously this is -- the networks that

- 1 carry JSC like TBS and TNT are not carrying
- 2 just JSC. So it's just an indicator across
- 3 networks that do or don't carry any of the JSC
- 4 programming.
- 5 So you can see that the price per sub
- 6 per month or the average affiliate fee for the
- 7 networks that carry the JSC programming is
- 8 about 75 cents versus about 17 cents for the
- 9 networks that don't.
- 10 Q. Okay. Geoff, you can take that down.
- Dr. Israel, you'll see in addition to
- the binder with your testimony, there's a big
- 13 binder up there with some other witnesses'
- 14 testimony in it?
- 15 A. I see that.
- 16 Q. So if you could look in there at
- 17 Dr. Gray's written rebuttal testimony.
- 18 A. Okay.
- 19 Q. And if you could just go to paragraph
- 20 59 on page 24, and Dr. Gray says, "While CSOs
- 21 may place a high value on live team sports
- 22 programming carried by certain cable networks,
- 23 as described by Dr. Crawford, economic
- 24 principles suggest they bundle these
- 25 sports-focused cable networks with other

- 1 channels, distant signal channels and local
- 2 broadcast channels, each with little or no
- 3 sports programming."
- 4 Does that alter any of your
- 5 conclusions?
- A. I mean, no. We know that in the case
- 7 of what the CSOs are carrying with the distant
- 8 signals in other programming or what the, you
- 9 know, cable networks are carrying, they are
- 10 bundling together different types of content.
- 11 All of my analysis is designed to, you
- 12 know, take that bundling as given and see what
- they're paying or how much they're valuing the
- 14 different types of content that they're
- 15 carrying. So the fact that they're bundling
- 16 together different types of content, you know,
- 17 doesn't change anything. It's sort of the
- 18 heart of my analysis to unpack what the value
- 19 of the pieces of the bundle are.
- 20 Q. Okay. Then going on to the next
- 21 paragraph, paragraph 60, Dr. Gray says, "After
- 22 negotiating programming deals with cable
- 23 networks carrying live team sports programming,
- 24 CSOs may then have a sufficient quantity of
- 25 that type of programming to bundle for its

- 1 current or potential subscribers. That is live
- team sports programming would be less valuable
- 3 to CSOs than other types of programming."
- 4 Do you agree or disagree with that and
- 5 why?
- A. I mean, obviously, the CSOs have more
- 7 than just distant signals. So they have
- 8 content of various types from broadcast and
- 9 cable networks.
- 10 And so the analysis is that --
- 11 everything I'm doing in the analysis is looking
- 12 at the value of the distant signal content
- 13 conditional on other content that they have.
- 14 But, obviously, their other content
- includes, you know, syndicated programs, news
- 16 programs, religious programs. So there's no
- 17 basis that I can see to say that because they
- 18 have other sports, that means the distant
- 19 signal sports content is worth less or same for
- 20 other content.
- You need to do the analysis like I
- 22 have done to figure out what that value is,
- 23 conditional on the other programming they have.
- Q. And just as CSOs have other sources of
- 25 sports programming, do CSOs also have other

- 1 sources of, for example, Program Suppliers-type
- 2 programming?
- 3 A. Sure. I mean, they have many, many
- 4 cable and broadcast networks. So they're going
- 5 to have other syndicated shows. They're going
- to have other news shows. They're going to
- 7 have other religious shows.
- 8 And that's what -- you know, that's
- 9 the nature of this industry, is CSOs carry
- 10 large bundles of content. And as we mentioned
- 11 earlier, the -- you know, the way the free
- 12 markets in this industry work is they negotiate
- 13 for content to add to that bundle.
- So the job here is to see how much the
- 15 additional content is worth. And that's what
- 16 the regression and my other analysis does.
- 17 Q. And if you could turn back to
- 18 paragraph 31 of Dr. Gray's rebuttal, he does
- 19 some manipulations to your regression as set
- 20 forth in what he calls Israel modified royalty
- 21 shares.
- 22 Have you reviewed those calculations
- and the underlying documents that were produced
- 24 for them?
- 25 A. Yes.

- 1 O. And what did you conclude about
- 2 Dr. Gray's modifications to your regression?
- 3 A. So I concluded that they weren't
- 4 valid. I'm happy to explain why.
- 5 Q. Please do.
- 6 A. So, I mean, he makes a couple of
- 7 changes to -- to the regression. So one of
- 8 which we talked about earlier is to eliminate
- 9 all of the CSOs that only pay the minimum
- 10 payment.
- 11 That's throwing away a lot of data.
- 12 So you're not -- you're not learning based on
- 13 the choices that those systems are making.
- 14 You're not learning of the relationship between
- 15 all the control variables based on those
- 16 systems. You're not -- and you're not able to
- 17 compare those systems to systems that choose
- 18 more.
- 19 So, first of all, it's throwing away
- lots of information to throw away these systems
- 21 that are making choices and making that
- 22 particular payment.
- JUDGE FEDER: Are there any minimum
- 24 fee systems in your analysis that did not opt
- 25 to carry any distant signals?

1 THE WITNESS: I don't -- I know there are some that don't carry all the way to the 2 3 minimum. There may be some that don't choose to carry any. Yeah. And because the economics of those 5 systems may be somewhat different, I think both Dr. Waldfogel and I put in a dummy variable or 7 an indicated variable for the minimum fee 8 9 systems to allow for them to have different 10 payments and different economics. So in my view, that's the way I control for that sort of 11 difference as opposed to just dropping them 12 from the analysis. 13 The other change, a major change, that 14 15 Dr. Gray makes is he changes the nature of the 16 measure of the royalties by a lot. He does a

18 Instead of using the actual royalty

couple things to it.

19 payment, he first takes the royalty payment and

20 subtracts off what the minimum fee would have

21 been. And he then takes the logarithm of that

22 difference.

17

23 My main complaint with that is really

the first part, in subtracting off the minimum

25 payment. What's critical about everything

- we're doing here is you want to be able to look 1 at relative value, what's the -- what's the 2 relative amount that I pay for different types 3 of content. 4 So if you have one system that pays 5 \$100 and carries one type and another system 6 that pays \$200 and carries another type, you 7 would want to see that \$200 is twice as big as 8 \$100. So you can do the relative value. 9 If you subtract off the minimum 10 payment, right -- suppose the minimum payment 11 was 100 -- then that first system would be zero 12 for its new variable and the second system 13 would be 100 for its new variable. 14 Taking the log is kind of a technical 15 thing, but the real issue is when you do that 16 subtraction of the minimum payment and reset 17 where zero is, you mess up all the relative 18 payments that people are making in a way that I 19 think is consequential. You're no longer 20 measuring relative payments. You're measuring 21 something else. 22
- And, therefore, I just don't consider
 that valid when our goal is to measure relative
 value.

- 1 BY MR. LAANE:
- 2 O. Okay. Switching witnesses on you, if
- you could turn to Dr. Lisa George's rebuttal
- 4 report, Exhibit 4007. And have you reviewed
- 5 the adjustments to your regression that she
- 6 discusses beginning at page 17 of her rebuttal
- 7 testimony?
- 8 A. Yes.
- 9 Q. Okay. And, first, could you just
- 10 generally summarize the types of changes she
- 11 made to your regression?
- 12 A. I think there are three main
- 13 categories. She used them -- for Canadian
- 14 minutes, in particular, she used some different
- 15 categorization that she said reflected better
- the actual Canadian programming on Canadian
- 17 signals. So that's Number 1.
- Number 2, she -- all those minutes
- 19 coefficients we saw before, the value of the
- 20 minutes, she split those up so that there was a
- value for CSOs inside the Canadian zone or
- 22 outside the Canadian zone. So she let the
- value differ across different types of CSOs.
- 24 And then, third, she -- where I had a
- 25 single variable measuring the number of local

- 1 broadcast channels the CSO carried, which I
- 2 considered one more measure of the size of the
- 3 CSO, she split that out into a large number of
- 4 different counts of different types of local
- 5 signals.
- 6 O. And focusing on the first change you
- 7 mentioned, about the categorization of the
- 8 minutes, if you use Dr. George's
- 9 categorizations but keep your model, and after
- 10 you got her rebuttal, did you take a look to
- 11 see what would happen if you took her
- 12 categorizations but ran them through your
- 13 model?
- 14 A. Yes, I did.
- 15 Q. And what impact does that have on your
- 16 results?
- 17 MR. MacLEAN: Objection. Your Honor,
- 18 this is a new analysis that hasn't been offered
- in written testimony.
- 20 MR. LAANE: He's responding orally to
- 21 rebuttal which had attacked his analysis on
- this basis. He's not going to put in any new
- 23 study or quantitative figures, but just explain
- 24 what he found was the impact of accepting that
- 25 portion of her criticism that he should have

- 1 used the Canadians' categorizations.
- JUDGE BARNETT: He may do that.
- 3 Overruled.
- 4 THE WITNESS: So it has only a very
- 5 small effect. If you use the categorizations
- 6 that Dr. George provided and then, you know,
- 7 update the regression using those
- 8 categorizations, none of the coefficients or
- 9 the implied shares change by much at all, maybe
- 10 a percentage point.
- 11 BY MR. LAANE:
- 12 Q. But adopting her other changes to your
- model does change the results?
- 14 A. Yes.
- 15 Q. Okay. Do you have an opinion on
- 16 whether those changes to your model were
- 17 economically appropriate?
- 18 A. I mean, yes, I find them
- inappropriate, in particular, the -- well, I
- 20 can mention both, but the main one is the
- 21 addition of many control variables for
- 22 different types of local stations, different
- 23 local content.
- 24 I mean, the reason you add a control
- variable would be that you don't think that

1 source of variation should be used to measure the valuation. So it's certainly true that 2 3 different CSOs that have different local signals available to them make different 4 choices about what distant signals to carry. 5 And that -- those different choices reflect their valuations on the distant 7 signals. But that's an economically valid 8 source of differences in the decisions that 9 10 systems are making. So it's not something that you should 11 12 control away or you're throwing away variation that's relevant. I mean, those are valid 13 14 sources. The types of control variables that I 15 16 would include are things like about the size of the system, because the size of the system is a 17 totally separate basis for why royalties get 18 higher. Controlling for size, I want to see 19 all of the differences in the distant signal 20 choices that different CSOs make, and I want to 21 use that in my analysis. 22 And by controlling for it, you're not 23

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letting the regression rely on that interesting

source of variation.

24

- 1 She also split the minutes up, the
- values up into inside the Canadian zone and
- 3 outside the Canadian zone. I mean, ultimately
- 4 what matters is the overall average value, so I
- 5 don't see a reason to do that, but really my
- 6 main concern is by adding these controls, she
- 7 is eliminating important variation that we can
- 8 use to learn about the valuation on the
- 9 signals.
- 10 Q. Okay. I'd like to go back now to your
- 11 written rebuttal testimony, so back to the
- 12 smaller binder.
- 13 A. Okay.
- 14 Q. Exhibit 1087. And you address several
- 15 witnesses and several issues. So in the
- 16 interest of time, I just want to focus on a few
- 17 areas and leave the rest to your written
- 18 testimony.
- 19 First, if you could turn to page 16,
- 20 you discuss -- or you state at paragraph 34 --
- 21 well, first, you're discussing generally there
- 22 Dr. Gray's computation of what he calls volume,
- 23 correct?
- 24 A. That's right.
- Q. Okay. And you state that "Gray's

- 1 Table 1 is flawed and misleading, because it
- does not account for the number of CSOs that
- 3 receive each distant signal, let alone the
- 4 number of subscribers to whom the programming
- 5 is retransmitted."
- 6 Could you please explain that for us?
- 7 A. It's basically when he's computing
- 8 volume, it's just volume of minutes. So if a
- 9 minute of a given type of programming is
- 10 retransmitted by any CSO to any number of
- subscribers, be it 5 or 5 million, that counts
- 12 as one minute.
- 13 And so he's just taking shares of
- 14 those minutes, but a minute is a minute no
- 15 matter how many people actually have access to
- 16 that minute. And so that's, to me, not a
- meaningful measure of sort of how widely
- 18 distributed or how -- you know, how important
- 19 that minute is.
- 20 Q. Okay. And if you could look at Table
- 21 4 on page 18.
- 22 And, Geoff, if you could bring up
- 23 slide 17, please.
- So what are you comparing here and
- 25 why, Dr. Israel?

- 1 A. So this is Dr. Gray's volume measure
- that we just discussed, where a minute is just
- a minute, versus Dr. Crawford's modification of
- 4 that, where Dr. Crawford weighted each minute
- 5 by the number of -- really the number of
- 6 subscribers who would have received that minute
- 7 on their cable system.
- And so you can see it makes -- it's --
- 9 it makes a large difference when you account
- 10 for the number of subscribers. So the sports
- 11 share, for example, goes up by roughly ten
- 12 times when you account for the fact that, you
- 13 know, sports minutes in WGN, for example,
- 14 being, you know, sent to systems that have many
- 15 more subscribers.
- 16 O. Now, if you could turn to paragraph 65
- 17 of Dr. Gray's rebuttal.
- 18 A. Back to his rebuttal?
- 19 Q. Yes. Sorry about that.
- 20 A. It's okay. Okay.
- Q. Paragraph 65.
- 22 A. Um-hum. Sorry. There's just a lot of
- 23 pages in this binder. Yep.
- 0. Okay. And we can see here he's
- 25 comparing what he says are the number of

- 1 minutes of live team sports and other sports in
- 2 his data set.
- 3 Did he weight those numbers by the
- 4 number of distant subscribers receiving the
- 5 programming?
- 6 A. No.
- 7 Q. If you do weight by distant
- 8 subscribers, what impact does that have on the
- 9 ratio of live team sports minutes to the other
- 10 sports minutes in his data set?
- 11 A. I mean, it makes an enormous
- 12 difference. The ratio here -- here I think it
- 13 sort of looks like about 30 percent or so other
- 14 sports. And if you actually weight by
- 15 subscribers similar to what's in the table on
- the screen, I think that falls below 5 percent
- 17 for other sports.
- 18 Q. Now not just limited to sports but as
- 19 a general matter, even if one does adjust for
- 20 the number of distant subscribers, is the
- 21 volume of retransmitted minutes a sound basis
- 22 for allocating relative value?
- 23 A. No, just as a matter of economics,
- 24 minutes are kind of a unit of how many of the
- 25 product there are. You obviously need to

- 1 multiply that by some measure of price or value
- 2 to be able to make a comparison.
- 3 O. Then going to page 21 of your rebuttal
- 4 testimony, you address Dr. Dr. Gray's analysis
- of what he describes as viewing. And have you
- 6 reviewed the written testimony of Dr. William
- 7 Wecker and Gary Harvey critiquing Dr. Gray's
- 8 viewing analysis?
- 9 A. Yes.
- 10 Q. Okay. Just putting to one side the
- 11 methodological issues that Dr. Wecker and
- 12 Mr. Harvey raised about the Gray methodology,
- do you have a view on whether viewing is an
- 14 appropriate way to measure relative value in
- 15 these proceedings?
- 16 A. Yeah. I mean, in my view, it's not.
- 17 I mean, viewing is one characteristic of
- 18 programming. You know, my experience in the
- 19 industry, you know, sometimes people look at
- viewing for certain purposes, but I think it's
- 21 generally known and accepted that viewing
- 22 doesn't capture value.
- There's a couple reasons for that.
- One is the buyers of the programming here are
- 25 CSOs. Right? They're putting together bundles

- of programming, and so viewing is not a --
- 2 something a CSO does. It's something
- 3 subscribers do. But viewing by its nature
- 4 doesn't capture the value the CSOs put on
- 5 diversified programming and putting together
- 6 bundles of different programs.
- 7 Even from the point of view of the
- 8 subscribers, you know, viewing is a choice of
- 9 what to watch. It doesn't reflect the
- 10 intensity of the preference. So it doesn't --
- 11 you know, somebody might watch one program over
- 12 another because it's slightly more valuable to
- them, and in another case it might be massively
- 14 more valuable to them. So by just counting up
- viewing, you're not capturing even at the
- 16 subscriber level anything like a willingness to
- 17 pay or a monetary value on the content.
- 18 O. Now I want I talk to turn briefly to
- 19 Dr. Stec. And, of course, we have both a Stec
- 20 and Steckel. So Stec is the one I'm referring
- 21 to here.
- 22 And did you see Dr. Stec's assertion
- that the Bortz survey measures willingness to
- 24 pay and that, in his view, relative willingness
- 25 to pay does not equal relative market value?

- 1 A. I did.
- Q. Okay. And if we assume that what the
- 3 Bortz survey measures is CSOs' willingness to
- 4 pay, can you tell us whether or not in your
- 5 opinion that would be useful in assessing
- 6 relative market value?
- 7 A. I think it's quite useful. I think
- 8 it's the right question in this industry. A
- 9 little discussion of this before. I mean, if I
- 10 think about how this industry functions, we
- 11 have nice analogies, right?
- I mean, there's lots of cable networks
- 13 and other broadcast networks that are
- 14 negotiated over and paid for in a free market.
- 15 And the way that that market works is that
- 16 the -- in every case that I know of, the
- 17 network or group of networks in some cases and
- 18 the CSO negotiate over a price.
- 19 And so Dr. Stec does an analysis where
- 20 he looks -- you know, he sort of looks at a
- 21 market-wide supply-and-demand curve and says
- what would the market price be? That might be
- 23 right in some other industries, but here we
- 24 know that prices are set by these negotiations
- 25 and -- in between networks and CSOs.

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1 And in those negotiations, standard
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- 2 economics tells us they're negotiating to
- 3 divide up the value that the network creates
- 4 for the CSO. And so, you know, the willingness
- 5 to pay or sort of the maximum value that the
- 6 network puts on -- or the CSO puts on that
- 7 network, you know, is the key driver in
- 8 standard economic analysis of negotiations.
- 9 So the relative willingness to pay, in
- 10 my mind, is the key driver of what would be the
- 11 relative negotiated price for different types
- 12 of content.
- 13 Q. Okay. I now want to turn briefly to
- 14 the Horowitz survey.
- And, Geoff, if you could bring up
- 16 slide 18, please.
- 17 At paragraph 68 of your rebuttal, you
- 18 state that the actual marketplace evidence
- 19 supports use of the Bortz survey, not the
- 20 Horowitz survey, and rejects Mr. Horowitz's
- 21 claim that not including a separate "other
- 22 sports" category invalidates the Bortz results.
- 23 Could you please explain that opinion
- 24 for us.
- 25 A. Sure. So, I mean, the first part, the

1	corroboration of the surveys relative to each
2	other. I mean, this slide has what the Israel
3	and Crawford regressions find relative to what
4	the Bortz and Horowitz surveys find.
5	And I think it's clear that the you
6	know, going back to what the regressions do,
7	which is sort of match overall correlations in
8	the values and then, you know, match rankings
9	of the values, I think it's clear that the
10	regressions better match Bortz than Horowitz.
11	You can see, you know, a major
12	difference between the Bortz and Horowitz
13	results is they basically flip around the
14	shares put on sports and Program Suppliers.
15	They change the rankings and basically reverse
16	the two.
17	Both the Israel and Crawford
18	regression results, you know, are much closer
19	to Bortz and find sports similar sports
20	shares to Bortz and find that sports has
21	substantially more value than Program
22	Suppliers' content.
23	And then if you go to, you know, the
24	next two down, again you see that the Israel
25	and Crawford results match the ranking of the

- 1 Bortz survey and not the Horowitz survey.
- 2 And I think the other part of what you
- 3 asked was about the "other sports" category.
- 4 And as I understand it, the criticism that has
- 5 been made is that the Bortz sports category
- 6 might include -- people might at least think it
- 7 includes other sports, not just JSC, and maybe
- 8 that inflates the value in the Bortz survey.
- 9 But, in fact, contrary to that, the
- 10 Israel and Crawford regressions both correctly
- 11 put all of the other sports content into its
- 12 appropriate category. So in my regression, for
- example, other sports, goes in Program
- 14 Suppliers or CTV or wherever it should go.
- So I don't have any -- the issue of
- 16 putting "other sports" in with sports. And yet
- 17 my values, and my sports value in particular,
- 18 very closely matches Bortz, indicating that's
- 19 not driving his results.
- 20 Q. All right. Thank you.
- 21 Your rebuttal also discusses
- 22 Mr. Mansell and, again in the interest of time,
- 23 I'll leave most of that to the written
- 24 testimony. But I did want to ask you a little
- 25 bit about his assertions about the migration of

- 1 sports.
- 2 And, Geoff, if you could put up slide
- 3 19, please.
- And, Dr. Israel, based on your review
- 5 as compared to the last time period the Judges
- 6 considered, '04-'05, had there, in fact, been a
- 7 decline in the relative amount of live team
- 8 sports on distant signals as compared with the
- 9 2010 through '13 period?
- 10 A. No. I mean, this -- this table that's
- on the page or on the screen now compares the
- 12 Crawford volumes we talked about a minute ago
- 13 with a similar calculation that was done in
- 14 2004-2005. So both of them are looking at
- 15 volume shares weighted by subscribers
- 16 appropriately for compensable minutes.
- 17 And you can see that if -- you know,
- in fact, as it turns out, within the distant
- 19 signals in particular, the volume share of
- 20 sports has gone up a fair bit over the two time
- 21 periods.
- Q. What if we were to assume just
- 23 hypothetically that there had been a decline in
- 24 the relative amount of sports? Would that
- 25 impact the reliability of your regression or

- 1 the Crawford regression?
- 2 A. No, that -- no, I don't see how it
- 3 could. Again, volume is not value. And,
- 4 importantly, whatever -- you know, whatever
- 5 changes in the marketplace are happening over
- time are, you know, captured in the data.
- 7 So the Bortz survey is asking people
- 8 as of 2010 through 2013. The Israel and
- 9 Crawford regressions are using data from that
- same time period. So the whole purpose of
- 11 doing the empirical analysis, again, is to
- 12 capture whatever changes have happened in the
- 13 marketplace.
- 14 So the fact that there have been such
- changes wouldn't invalidate the studies.
- 16 Q. Okay. Now I want to turn to
- 17 Dr. Steckel, and in the interest of time again,
- 18 I'll leave most of it to your written
- 19 testimony, but I did want to ask you about your
- 20 statement at paragraph 50 of your rebuttal that
- 21 you disagree with Dr. Steckel's assertion that
- one should focus on the opinions of cable
- 23 subscribers rather than the opinions of CSOs.
- 24 And can you explain why you disagree
- 25 with Dr. Steckel on that?

- 1 A. I mean, CSOs are the buyers of the
- 2 content. So if you want to determine the value
- of a product, and you want to do so with a
- 4 survey or your regression, you look at the
- 5 behavior or the answers of the buyers of the
- 6 content. And here that's the CSO.
- 7 Part of what they're doing is
- 8 reflecting what their subscribers value, but
- 9 ultimately what matters is the CSOs'
- 10 willingness to pay, given that -- you know,
- given all the factors that determine the value
- they place on the content.
- 13 Q. Okay. And Dr. Steckel makes various
- 14 criticisms of the Bortz survey. If he were
- 15 correct about those criticisms, would you
- 16 expect the survey results to align with actual
- 17 marketplace evidence?
- 18 A. No. I mean, in my view, economists
- 19 often ask questions about surveys and surveys
- are very valuable, but it's important to match
- 21 the surveys to marketplace data. And that's --
- you know, I think the best answer in my view to
- 23 any question somebody raises about a survey is
- 24 to go see if the survey matches what's in the
- 25 marketplace. That's, in my view, sort of the

fundamental reason to do what I've done. 1 JUDGE STRICKLER: Does it work the 2 other way around too, that if you look at 3 actual marketplace results through a regression 4 analysis, that you should check those results 5 against the survey to make it more reliable? 6 THE WITNESS: I mean, I think it's 7 I mean, when I say corroborate, I think 8 it's fair to see the extent to which they match 9 10 one another. I mean, in -- in this case, you know, 11 my view is that the Bortz survey goes directly 12 to the question that we want to answer with a 13 continuous scale that lets people answer it and 14 give their actual relative value, whereas the 15 16 regression is drawing on kind of zero/one choices that are a little more discrete and 17 maybe not -- don't let you quite fine-tune the 18 values as much. 19 So in my view, the Bortz survey sort 20 of gets at the heart of the matter and the 21 regression is more of a check just because of 22 the nature of the data. So that's how I think 23 about it. But I would agree that the match in 24 25 each direction is relevant.

- JUDGE STRICKLER: Thank you.
- 2 BY MR. LAANE:
- 3 Q. And, finally, I just wanted to make
- 4 sure we were clear on one thing about minimum
- 5 fee systems. So you did include minimum fee
- 6 systems in the regression if the -- if that
- 7 system carried at least a distant signal; is
- 8 that right?
- 9 A. Right. That would be correct. So
- 10 then it would have a distant signal and it
- 11 would have some minutes to show up in the
- 12 regression.
- 13 Q. Okay. But a minimum fee system that
- 14 carried no distant signals at all was excluded
- 15 from the data set for the regression; is that
- 16 right?
- 17 A. Right. I mean, it would have no
- 18 minutes of the any of the types of content. So
- 19 it was a question before, and maybe I
- 20 misunderstood it, I was thinking of whether
- 21 there were any such systems, but the regression
- itself, which is actually looking at the number
- of minutes, obviously needs at least one signal
- 24 so that there are some minutes.
- 25 Q. Okay.

- 1 MR. LAANE: Thank you, Dr. Israel. I
- 2 have nothing further at this time.
- 3 CROSS-EXAMINATION
- 4 BY MR. CHO:
- 5 Q. Good morning, Dr. Israel.
- 6 A. Good morning.
- 7 Q. My name is Dustin Cho and I represent
- 8 the Public Television Claimants.
- 9 Dr. Israel, I'm going to start by
- 10 talking about the shares that you calculated
- 11 based on your regression analysis.
- 12 A. Okay.
- 13 Q. Let me see if we can get our slides
- 14 up. There we go.
- So it's your testimony that your
- 16 regression shares corroborate the Bortz survey
- 17 share for sports, right?
- 18 A. Yes. I'm -- generally, I think the
- 19 regression -- the regression results
- 20 corroborate the Bortz survey.
- 21 Q. In particular, for sports?
- 22 A. Certainly for sports. But my overall
- 23 conclusion is that these results -- you know,
- given my experience in economics, that these
- 25 sorts of regression results are a close match

- 1 for what the -- for the Bortz survey.
- Q. Well, in fact, your regressions share
- 3 for sports is within one percentage point, I
- 4 think, of the average Bortz share for sports;
- 5 is that right?
- 6 A. Yes.
- 7 Q. And your regression share for the
- 8 Commercial Television Claimants is within 2
- 9 percentage points of the average Bortz share?
- 10 A. I don't remember the numbers, but that
- 11 sounds right.
- 12 Q. Okay.
- 13 A. I mean, it certainly looked -- the
- 14 bars are very close on what we have in front of
- 15 us.
- 16 Q. But there's a bigger difference for
- 17 the other parties between their Bortz shares
- and their shares according to your regression,
- 19 right?
- 20 A. Yes.
- Q. You didn't report any confidence
- 22 intervals for the shares that you calculated
- 23 based on your regressions, did you?
- 24 A. I don't believe I included confidence
- 25 intervals for the shares as such. I certainly

- included standard errors for the coefficients.
- 2 So one could adjust those to compute confidence
- 3 intervals.
- 4 Q. Okay. But you noted in your direct
- 5 testimony that only sports and the Commercial
- 6 Television shares, according to your
- 7 regression, were within the range of annual
- 8 results of the Bortz survey, right?
- 9 A. I think that's right. I think -- I
- 10 think what I said was that for Program
- 11 Suppliers, it was -- you know, you can see it
- 12 here now that you put it up -- very near the
- bottom end of the range, but the other two were
- 14 within the range, yeah.
- 15 Q. And you're just comparing, you know,
- 16 over the four years of Bortz shares, what the
- 17 low was, what the high was, and then whether
- 18 your regression estimate for that share fell in
- 19 that range?
- 20 A. That's what I'm doing here, yes.
- 21 Q. So your regression gives Program
- 22 Suppliers more than 4 percentage points less
- 23 than the average Bortz survey?
- 24 A. Yes. It's just over 4 percent below,
- 25 based on the regression shares.

- 1 O. And your regression's average share
- 2 for Program Suppliers is lower than the lowest
- 3 share that it received in any of the years of
- 4 the Bortz survey?
- 5 A. Right, it's slightly lower. Again, my
- 6 general view, given what I've seen from
- 7 regressions in surveys, is that these numbers
- 8 are -- are matching quite well. But, yes, I
- 9 agree with that.
- 10 Q. And your regression suggests that
- 11 Devotional programming has very little if any
- 12 value to cable operators?
- 13 A. I mean, again, I would say that my
- 14 regression results generally corroborate Bortz
- and finds -- the regression itself finds a low
- 16 share for Devotional. I'm not claiming the
- 17 regression indicates no value for Devotional.
- 18 But, certainly, the regression finds a low
- 19 share for Devotional, zero.
- Q. Well, the Bortz survey, on the other
- 21 hand, gives an average share to Devotionals of
- 22 nearly 5 percent?
- 23 A. Yes.
- O. And then there's the biggest
- 25 difference on this chart, Public Television.

- 1 The share you calculated for Public Television
- is more than 8 percentage points greater than
- 3 the Bortz share for Public Television; is that
- 4 right?
- 5 A. More relevant -- than what comes out
- of the Bortz survey. I understand there's
- 7 discussions and Mr. Trautman includes some
- 8 adjustment for Public Television that I haven't
- 9 been that close to. I think that adjusts his
- 10 number up some. But, yes, it's a higher number
- 11 than comes out of the survey.
- 12 Q. Well, in fact, your regression's
- valuation of Public Television programming is
- 14 more than two and a half times greater than the
- 15 Bortz share for Public Television, isn't it?
- 16 A. It certainly is, again, that much
- 17 higher for what's in the survey. I think it
- 18 gets somewhat closer after the adjustment
- 19 Mr. Trautman talks about. I don't remember the
- 20 exact number there.
- Q. Okay. Well, here's what you said on
- 22 this issue: "For the three lower ranked
- 23 categories, programming categories (Public
- 24 Television, Devotional, and Canadian), my
- 25 regression model agrees with the Bortz Survey

- on the relative share of the sum of public
- 2 broadcasting, plus Devotional, plus Canadian
- 3 categories, a total of roughly 9 to
- 4 13 percent."
- 5 Is that right?
- A. Yes, that's -- that was one way I
- 7 looked at how well it was matching to the lower
- 8 valued categories. As I mentioned before, in
- 9 my experience, regressions of this type often
- 10 struggle to match at the lower end. And so I
- 11 wanted to look at various metrics of how well
- 12 it was doing.
- 13 Q. Did the Bortz survey ask cable
- 14 operators to value the sum of Public
- 15 Television, Devotional, and Canadian
- 16 programming or did the Bortz survey ask
- 17 respondents to provide valuations for each of
- 18 those categories separately?
- 19 A. It asked for each category.
- 20 O. And how about your regression? Did it
- 21 lump together all three of those categories of
- 22 programming or did it analyze the value of
- 23 those three categories separately?
- A. No, the regression measured each one
- 25 separately.

- 1 O. So what's the significance of your
- 2 observation here that your regression model
- 3 agrees with the Bortz survey on the relative
- 4 share of the sum of those three categories?
- 5 A. I mean, frankly, I almost think about
- 6 it in reverse. I mean, it's saying if it
- 7 matches the sum of those three, then it matches
- 8 the sum of the top three.
- 9 And so I was just basically looking at
- 10 whether it sort of got the overall split right
- 11 among the top categories and the lower ranked
- 12 categories. It was really just one metric to
- 13 see how it was doing.
- 14 And what I largely think about, is it
- 15 generally getting the amount that goes to the
- 16 higher ranked categories right? Because,
- 17 again, in my experience, that's what
- 18 regressions of this type are best at.
- 19 Q. Well, another question about your
- 20 statement here. Doesn't your regression
- 21 indicate that Public Television's share alone
- is more than 3 percentage points more than the
- 23 Bortz survey's average shares for all three of
- 24 these categories combined?
- A. Again, that's true, just for the sum,

- 1 taking the Bortz survey directly. Again, I
- 2 understand there was some adjustment made to
- 3 these shares, and I think that makes the sum
- 4 quite close. But, yes, I agree with your
- 5 statement for the survey without the
- 6 adjustment.
- 7 Q. Well, is it fair to say that your
- 8 regression contradicts the Bortz survey as to
- 9 the relative value of Public Television
- 10 programming?
- 11 A. I don't see it as a contradiction. My
- view of these regressions is they can generally
- 13 corroborate overall rankings and they do better
- 14 at the high end. I would agree it gets a
- 15 higher number for Public Television, but I
- 16 consider this, the correlation that we're
- 17 seeing here, strikingly good from my economic
- 18 experience.
- 19 So there's differences in Public
- 20 Television is higher, but I don't consider
- 21 these results a contradiction of the Bortz
- 22 survey.
- JUDGE STRICKLER: When you say "these
- 24 results," you mean overall or specifically to
- 25 Public Television?

1 THE WITNESS: I mean overall. I mean,
2 I agree it's higher for Public Television, no

- 3 question about it. My view is that regressions
- 4 like this are best at sort of overall
- 5 corroboration and best at the stuff that's
- 6 carried more often.
- 7 So I consider them to be a
- 8 corroboration of the overall findings for
- 9 Bortz. I certainly agree it gets a higher
- 10 number for Public Television.
- JUDGE STRICKLER: Would you say that
- 12 your regression fails to confirm the Bortz
- 13 survey results as it relates to Public
- 14 Television before the additional adjustments
- 15 are made to the Bortz survey?
- 16 THE WITNESS: I think I would say the
- 17 regression indicates a higher value for Public
- 18 Television than for Bortz. It certainly
- 19 supports, I think, some adjustment for Bortz.
- 20 My view is that we shouldn't use the
- 21 exact number from the regression at the low
- 22 end, but I think it's fair to say that my
- 23 regression indicates a higher value than -- for
- 24 Public Television than would be in the raw
- 25 Bortz data.

- 1 JUDGE STRICKLER: Thank you.
- 2 BY MR. CHO:
- 3 Q. So did you -- when you were deciding
- 4 whether or not your regression confirms the
- 5 Bortz survey results, did you look at any
- adjustment to the Bortz survey or were you
- 7 comparing it with the Bortz survey as
- 8 Mr. Trautman presented it?
- 9 A. I mean, I think I've done both over
- 10 the course of my analysis. Certainly when I
- 11 first looked at the numbers, I saw the Bortz
- 12 survey numbers absent any adjustment. But
- during the course of the testimonies, I've seen
- 14 that there were adjustments that were made, so
- 15 I considered that as well.
- 16 Q. You didn't discuss that in any of your
- 17 testimony, did you?
- 18 A. No, that's fair. I mean, there has
- 19 been ongoing discussions in rebuttals and
- things, so I've continued to review what people
- 21 have done, but it's fair that my initial and
- 22 most of my comparisons in the testimony were of
- 23 the Bortz numbers themselves.
- Q. So along those lines, I want to ask
- you what you meant by these two sentences in

1 your written rebuttal testimony. You wrote, "As noted above, my empirical analysis of 2 marketplace outcomes supports the results of 3 the Bortz surveys for royalty allocation. 4 such, I support the results of the 2010-13 5 Bortz surveys for the royalty allocation to all parties, including Devotional Claimants." 7 Why do you support using the Bortz 8 survey shares for all parties, including 9 Devotional Claimants, when your empirical 10 analysis and marketplace outcomes does not 1.1 12 support the results of the Bortz surveys for all of the parties individually? 13 14 Again, I think the appropriate way to use the regression like this is to -- overall. 15 I think the right question is, overall, does it 1.6 indicate that the survey results are on point 17 or generally correlated? 18 And it was given -- as I mentioned in 19 an earlier answer, the empirical data we have 20 in this case is quite good, but it's -- you 2.1 know, it requires sort of discrete zero/one 22 choices between different types of content, 23 whereas the Bortz survey lets people make more 24

fine-tuned indications of their value.

1	So in my mind, the question is the
2	survey is asking the right question. I just
3	want on to make sure the survey is not missing
4	marketplace outcomes generally. And when I
5	find that it's not, that the correlation is
6	quite good in my experience, then that says I
7	have faith in the survey and, therefore, I
8	would rely on the survey because I think it's
9	going right to the relevant question.
10	Q. How far apart for what you call the
11	smaller categories, how far apart would your
12	estimate from a regression have to be from the
13	Bortz survey share for you to feel that it was
14	not corroborating that party's share?
15	A. I don't have an exact number. I list
16	in my reports the way I looked at that. I
17	think, as I said, it's relevant that it's
18	getting the overall top categories quite close.
19	It's getting the rankings quite close.
20	If the rankings were different more
21	than one time, say, or even the rankings were
22	different or if the you know, if it didn't
23	have, basically, the right overall value for
24	the top categories, I'd start to worry more.
25	But because, in my experience,

1 regressions of this type don't do as well in lower valued products that aren't consumed or 2 3 valued as high, I generally wouldn't discount the survey based on missing at the lower end, 4 as long as it's getting the overall rankings 5 right and getting the splits right at the high end. 7 JUDGE STRICKLER: If the sentence --8 say that you wrote -- the second sentence 9 10 that's up on the screen there, instead of the phrase "all parties," but it had said the 11 12 royalty allocation to each party, including Devotional Claimants, would you still stand by 13 14 that sentence if you made that change? THE WITNESS: I would stand by the 15 I do think, and as I've continued to 16 sentence. review the testimony and understand the details 17 of the Bortz adjustment and the fact that the 18 survey, as I understand it, wasn't sent to CSOs 19 that only carried public, I think an adjustment 20 to public is supported by the -- especially 2.1 given that the survey people themselves are 22 saying an adjustment should be made, I think 23 the regression supports the adjustment. 24 25 JUDGE STRICKLER: If we had to

1	choose
2	THE WITNESS: But
3	JUDGE STRICKLER: I'm sorry.
4	THE WITNESS: No, no.
5	JUDGE STRICKLER: If we had to choose
6	between the adjustment that was made to the
7	Bortz survey and your regression results as it
8	relates particularly to the category of Public
9	Television, which one would you say is more
10	reliable?
11	THE WITNESS: I mean, I would tend to
12	favor an adjustment that works off the survey,
13	just because I've seen these sorts of
14	regression results in other settings at the low
15	value, you know, have some difficulty matching
16	exactly the numbers.
17	My view of the regressions and
18	others may have other views is they should
19	corroborate the overall rankings and the
20	general patterns. I don't think these
21	regressions are designed because of the sort
22	of lumpiness of the decisions that people can
23	make, I don't think they're designed to be plus
24	or minus 2 or 3 percent on the valuations.
25	I think they're designed to indicate

```
JUDGE STRICKLER:
                                 So you think your
2
3
      regression does not corroborate the adjustment
      to the Bortz survey as it relates to Public
4
      Television and, therefore, we should rely on
5
      the Bortz survey?
 6
                             I think it corroborates
               THE WITNESS:
 7
      that an adjustment is appropriate.
                                           I think
8
      it's consistent with saying public is -- you
 9
      know, especially now that I've heard all of the
10
      testimony, that public seems low in the overall
11
12
      survey. But I -- so I think it corroborates
      the adjustment. I just wouldn't put forward
13
      the regression as giving us the exact number of
14
      the adjustment.
15
                                 You think the more
16
               JUDGE STRICKLER:
      accurate adjustment is the adjustment that was
17
```

whether the surveys are generally reliable.

1

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rather than in the regression work you used?

THE WITNESS: Just to be clear, I have not done a detailed evaluation of the various adjustments that were made. So I don't want my testimony to be that I know the exact adjustment.

made to the Bortz survey in the survey work,

25 But I think an adjustment to the

- 1 survey to reflect who the survey was sent to is
- 2 consistent with my view that the survey is
- 3 going to the right exact question and can give
- a more refined, precise number than the
- 5 regression.
- JUDGE STRICKLER: Thank you.
- 7 BY MR. CHO:
- 8 Q. In your rebuttal testimony you write,
- 9 "It is also notable that the Bortz surveys, my
- 10 regression analysis, and the Crawford
- 11 regression analysis all value Sports within
- 12 roughly 3 percentage points of each other,
- while the Horowitz valuation (30 percent) is 5
- 14 percentage points below the lowest, and 8
- 15 percentage points below the highest valuation
- 16 from the other studies."
- 17 Right?
- 18 A. Yes.
- 19 Q. Now, if I swap out a few words in that
- 20 sentence, is it also notable in your opinion
- 21 that the Horowitz surveys, your regression
- 22 analysis, and the Crawford regression analysis
- 23 all value Public Television within roughly 4
- 24 percentage points of each other, while the
- 25 Bortz valuation, at 5.1 percent, is 8

- 1 percentage points below the lowest and 12
- 2 percentage points below the highest valuation
- 3 from the other studies?
- 4 A. I mean, I think I'd say a couple
- 5 things. Again, I certainly think that's --
- 6 that comparison supports an adjustment to
- 7 Bortz. I mean, the reason I made the statement
- 8 that I did was that I understood much -- or two
- 9 reasons.
- 10 One is, again, I think the regressions
- 11 do their best work at the high end when you
- 12 have content that's got more value. That's
- 13 what I've seen in my experience.
- But, two, I understood a lot of the
- debate between Horowitz and Bortz to be about
- this other sports category and what effect it
- 17 had. And so the sports comparison seemed
- 18 particularly important.
- But, again, I think that it's fair to
- 20 say that the regressions are supporting some
- 21 adjustment upward for public.
- 22 Q. So you said you haven't looked closely
- 23 at the adjustments that have been proposed with
- 24 respect to Public Television for the Bortz
- 25 survey; is that right?

- 1 A. I haven't looked at the
- 2 quantification. I understand they have to do
- 3 with the fact that the Bortz survey was not
- 4 sent, I think, to systems that only carried
- 5 public.
- So I -- and that, therefore, there
- 7 would need to be an adjustment up. But I have
- 8 not -- my understanding is there are different
- 9 views on what that adjustment should be, and I
- 10 have not compared them in that detail.
- 11 Q. Well, would it surprise you that
- 12 Mr. Trautman, who has testified about a couple
- of different types of adjustments, said all of
- 14 them would fall below even the low end of the
- 15 Horowitz, Israel, and Crawford shares for
- 16 Public Television?
- 17 A. I think I recall seeing that.
- 18 Q. In your opinion, do your regression
- 19 and Dr. Crawford's regression and the Horowitz
- 20 survey corroborate each other with respect to
- 21 Public Television's share?
- 22 A. Again, I mean, my view for the
- 23 corroboration question is it's -- it's an
- 24 overall correlation and ranking. And so I -- I
- really, particularly at the low end, don't

- 1 think of corroborating category by category.
- 2 I think of asking the question does
- 3 the survey seem to produce results that are in
- 4 line with marketplace outcomes?
- 5 Q. I guess I want to pull that apart. So
- 6 you said you don't think of the corroborating
- 7 category by category, but didn't you do exactly
- 8 that with respect to sports?
- 9 A. I certainly look at in more detail at
- 10 the valuations at the higher end and, again,
- 11 looked at sports because there was this debate
- 12 about other sports.
- 13 But I -- and I think the correct
- 14 overall way to look at the survey is whether it
- 15 matches the rankings, whether it generally
- 16 correlates with the values given, and then if
- 17 you're going to dive in in more detail, you
- 18 know, reqressions tend to do better at the high
- 19 end, and so I would -- I would put more
- 20 emphasis on that.
- Q. Okay. We're at a good stopping point.
- 22 Oh --
- JUDGE STRICKLER: You say regressions
- 24 do a better job at the high end. What's your
- 25 cutoff for the high end for this particular

- 1 regression?
- THE WITNESS: I mean, I've tended to
- 3 think of the top three categories and the
- 4 bottom three categories.
- 5 JUDGE STRICKLER: Thank you.
- 6 MR. CHO: We're at a good stopping
- 7 point if you'd like to take a break or I can
- 8 keep going.
- JUDGE BARNETT: How much more do you
- 10 have?
- MR. CHO: I would guess 45 minutes.
- JUDGE BARNETT: We'll go ahead and
- take our morning recess, 15 minutes.
- 14 (A recess was taken at 10:28 a.m.,
- 15 after which the trial resumed at 10:47 a.m.)
- 16 JUDGE BARNETT: Please be seated. Mr.
- 17 Cho?
- 18 MR. CHO: Your Honor, one piece of
- 19 housekeeping business.
- During the break we agreed, I believe
- 21 all the parties agreed to admit five exhibits
- that were filed by the Joint Sports Claimants
- 23 on Friday: Exhibits 1112, 1113, 1114, 1115,
- 24 and 1118.
- JUDGE BARNETT: Thank you. 1112

- 1 through 1115 inclusive are admitted, and 1118
- 2 is admitted.
- 3 (Exhibit Numbers 1112, 1113, 1114,
- 4 1115 and 1118 were marked and received into
- 5 evidence.)
- 6 BY MR. CHO:
- 7 Q. Thank you. So before the break, Dr.
- 8 Israel, we were talking about how your
- 9 regression may corroborate as to the three
- 10 largest shares; is that right?
- 11 A. I think it matches them well. So
- 12 that's one -- one sign that it corroborates the
- 13 survey results.
- 14 Q. And in your direct testimony you talk
- about it confirming the rank order of the top
- 16 four and the royalty share allocation of the
- 17 top three.
- 18 Why did you look at top four for the
- 19 rank order and royalty share allocation for
- 20 only the top three?
- 21 A. I mean, I wasn't trying to just look
- 22 at one or the other. I was just summarizing
- 23 various ways that I -- that I concluded that
- the regression results corroborated the survey.
- Q. So it is your opinion that the Public

- 1 Television category is not one of the larger
- 2 categories that you should look to to see
- 3 whether or not the regression that you ran
- 4 corroborates the Bortz survey?
- 5 A. I mean, again, it is my opinion that I
- 6 should look at the overall set of results to
- 7 see if they generally match what's in the Bortz
- 8 survey.
- 9 It doesn't surprise me that, for some
- of the smaller ones, some of the differences
- 11 are bigger.
- But really my overall opinion is that,
- 13 you know, in my professional experience, this
- 14 sort of match between a regression and a survey
- is -- is quite good relative to what I have
- 16 almost ever seen.
- 17 O. I think you keep using the word
- 18 smaller or larger. And I think it is important
- 19 to understand what you mean by that.
- 20 So what are you looking to when you
- 21 decide whether or not Public Television belongs
- in the larger category that you should look to
- 23 or the smaller category that you shouldn't look
- 24 to?
- 25 A. Again, I didn't make any sort of a

- 1 priori decision about what was large or what
- 2 was small. I looked at the overall set of
- 3 regression results and I asked myself: Are
- 4 these consistent generally with what the Bortz
- 5 survey has found? And I said yes.
- And there are some differences. And
- 7 the differences were in the three smallest
- 8 categories. A couple of those got negative
- 9 numbers. We have talked some about that. I
- don't think it is literally a negative value.
- 11 Public's number was too small. That justifies
- 12 some adjustment.
- But, again, it wasn't an a priori
- 14 decision about what was large or what was
- 15 small. It was just looking at the body of
- 16 evidence once I had it and asking whether that
- 17 seemed like the sort of match that indicates
- 18 support for the Bortz survey.
- 19 Q. You put up or you were asked earlier
- 20 this morning about this table a couple of
- 21 times.
- 22 And if you look at the Crawford
- 23 numbers in -- in your rebuttal report, it looks
- 24 like Public Television actually had the largest
- share of compensable minutes by Claimant group

- 1 weighted by subscribers. Is that right?
- JUDGE BARNETT: I'm sorry, Mr. Cho.
- 3 For the record, "this table"?
- 4 MR. CHO: Oh, I'm sorry. This is
- 5 Table 11 on page 34 of the written rebuttal
- 6 testimony of Dr. Israel, which is Exhibit 1187,
- 7 I think.
- JUDGE BARNETT: Thank you.
- 9 THE WITNESS: Yes. On this table the
- 10 Crawford results show the largest weighted
- 11 minutes for Public.
- 12 BY MR. CHO:
- 13 Q. Is that an indicator that Public
- 14 Television is a larger Claimant group or a
- 15 smaller Claimant group when you're talking
- 16 about, you know, which shares should be
- 17 corroborated by the Bortz survey -- by your
- 18 regression?
- 19 A. My discussion until now has been in
- 20 terms of value shares and value shares from
- 21 previous proceedings and things. On this
- 22 particular metric, Public has -- seems to have
- 23 the most minutes.
- 24 O. And turning to your written direct
- 25 testimony, which is Exhibit 1003, this is page

- 1 18 with your regression coefficients.
- 2 A. Um-hum.
- 3 Q. Is the regression coefficient for
- 4 Public Television actually the third largest,
- 5 greater than Program Suppliers?
- A. Yes. I mean, the product of the two
- 7 puts Program Suppliers well ahead of the
- 8 coefficient and the minutes but, yes, Public is
- 9 third in the coefficients.
- 10 Q. So would that also be an indicator
- 11 that maybe it is a larger category as opposed
- 12 to a smaller category for purposes of
- determining whether or not your regression is
- 14 corroborating the Bortz survey?
- 15 A. I mean, again, I look at -- I mean, my
- 16 comparison has been by the bottom line value
- 17 shares, but certainly on the coefficients it's
- 18 third.
- 19 Q. Okay. Let's talk a little bit about
- your regression in the year 2013.
- 21 Your regression does not include the
- 22 year 2013; is that right?
- 23 A. That's correct.
- 24 O. So based on your statement on page A-1
- of your rebuttal testimony, which is

- 1 Exhibit 1187, and it is up on the screen --
- 2 A. Okay.
- 3 Q. -- I take it the reason you didn't
- 4 include 2013 is because you didn't categorize
- 5 any programming data for 2013?
- A. No, didn't include any data for 2013
- 7 in the regressions, the regression data or the
- 8 programming categorization.
- 9 Q. I guess what I'm trying to get at is,
- is one of the reasons why you didn't do that
- 11 because you didn't have any programming data
- 12 categorized for 2013?
- 13 A. I mean, I would say we didn't go
- 14 through and categorize the data for 2013
- because just generally I didn't have regression
- 16 data for 2013.
- 17 So it's fair to say I didn't do it
- 18 because it hadn't been initially part of the
- 19 regressions, and I didn't have the data.
- 20 Q. Well, did you have access to any
- 21 programming data from 2013?
- 22 A. I honestly don't know all of the
- 23 background. I think that none of that data was
- 24 -- was purchased. I think that's right. I
- 25 mean, generally, I didn't have access to any

- data from 2013 to do the regressions from my
- 2 point of view.
- I honestly don't know sort of the
- 4 back, you know, my staff and sort of what data
- 5 had been purchased or not purchased. From my
- 6 analysis, I just didn't have any data from
- 7 2013.
- 8 Q. Did you ask counsel or anyone for
- 9 access to data from 2013?
- 10 MR. LAANE: Objection to the inquiry
- 11 into discussions with counsel.
- 12 BY MR. CHO:
- Q. Did you ask anyone for data from 2013?
- 14 A. No. I mean, as I mentioned in my
- 15 direct testimony, I had already been working
- for some time on 2010 to 2012, and because I
- 17 wanted to see if there was a corroboration.
- 18 If it corroborates for those three
- 19 years, that gives me confidence, you know, the
- 20 survey is doing a good job for those three
- 21 years.
- 22 So given the assignment was to -- to
- 23 check the corroboration, I didn't, you know, I
- 24 decided 2013 wasn't necessary to answer that
- 25 question.

- 1 Q. So you never asked anyone for 2013
- 2 data?
- 3 A. That's correct.
- 4 Q. Would you have preferred to have had
- 5 the data for all four years?
- A. I mean, again, I mean, all else equal,
- 7 another year of data is another year of data.
- 8 But given that the question is to corroborate,
- 9 you know, if it corroborates for the first
- three years, then the survey is doing a good
- 11 job.
- 12 So I saw minimal value in adding
- 13 another year.
- 14 O. You don't actually know what the
- 15 results of adding another year would have been
- until you add the other year; is that right?
- 17 A. I mean, at this point I have not run
- 18 my regression through 2013. I have seen what
- 19 Dr. Crawford did. I have seen the comparisons
- of his numbers to my numbers across the various
- 21 years.
- So I now have even more information to
- 23 say that 2013 doesn't appear to have changed
- the results. But really it was just a decision
- 25 that you need an experiment to decide if the

- 1 marketplace data corroborates Bortz. And 2010
- 2 through 2012 was a good experiment for that
- 3 question.
- Q. On page 7 of your rebuttal testimony
- 5 you state that Dr. Crawford gets his highest
- 6 implied royalty allocation for sports in 2013,
- 7 indicating that if you had included data for
- 8 2013 in your regression analysis, it likely
- 9 would have found an even greater average share
- 10 for Sports programming, right?
- 11 A. I mean, it certainly indicates that in
- 12 his case the Sports share went up, yeah.
- 13 Q. But that's what you wrote in your
- 14 testimony, right, on page 7 of your rebuttal
- 15 testimony?
- 16 A. Right. I mean, I did write that. But
- 17 the ultimate conclusion of that paragraph is
- 18 Dr. Crawford's analysis corroborates the Bortz
- 19 survey for 2013, and indicates that my focus on
- the period 2010 through 2012 does not bias my
- 21 results.
- 22 So all I'm trying to say is that my
- 23 conclusions are not biased by using those first
- three years.
- Q. Well, but in this particular footnote

- 1 you are actually saying that, if you had
- 2 included 2013 in your regression analysis, it
- 3 likely would have found an even greater share
- 4 of the average value of Sports programming.
- 5 Isn't that what you're saying here?
- A. Yeah, the footnote indicates that, if
- 7 anything, the Sports share in particular would
- 8 have gone up some, yes.
- 9 O. Okay. And in this statement you are
- 10 referring to figure 20 of Dr. Crawford's
- 11 testimony, which is for the record page 45 of
- 12 Exhibit 2004. And it is up on the screen.
- 13 Is this the table you were talking
- 14 about?
- 15 A. I think that's correct, yes.
- 16 Q. Dr. Crawford's implied royalty
- 17 allocation for Public Television in 2013 is
- above his average share for Public Television
- in all four years; is that right?
- 20 A. Yes, looks like it is the second
- 21 highest year but it is above the average, yes.
- Q. And for what it is worth, Mr.
- 23 Trautman's Bortz share for Public Television is
- 24 actually the highest in 2013 of all four years.
- 25 Is that right?

- 1 A. That looks to be correct, yes.
- 2 O. So is it fair to say that if you had
- 3 included data for 2013 in your regression
- 4 analysis, you likely would have found a greater
- 5 average value for Public Television
- 6 programming?
- 7 A. I mean, these indicators, at least,
- 8 you know, comparing to these other two
- 9 empirical analyses suggest yes, yeah.
- I mean, again, ultimately I am just
- 11 trying to corroborate what is in Bortz, so it
- 12 wouldn't change my conclusion, but these
- indicators make it look like the share would be
- 14 a little higher.
- 15 O. So it looks like for 2013 the Bortz
- 16 survey actually gave a lower share to sports
- 17 than it did for the average of all four years.
- 18 Do you still think that your
- 19 regression likely would have found a greater
- 20 average share for Sports programming if you had
- 21 included the 2013 data?
- 22 A. I mean, I can't say for certain. The
- 23 Crawford results indicate, yes, Bortz seems a
- 24 tiny bit lower. I mean, as you say, I don't
- 25 know if I haven't done it. But all of these

- 1 numbers are very close together, indicating
- that nothing about the corroboration would
- 3 change.
- Q. Well, do you think the Bortz surveys
- 5 are right, that sports value is lower than
- 6 average in 2013, or do you think the Crawford
- 7 analysis is right, that sports value was
- 8 highest in 2013?
- 9 A. I mean, I think both analyses are
- 10 indicating it is very close to the average.
- 11 Ultimately, as I have said, my view in the
- 12 proceeding is that the Bortz survey asks
- 13 exactly the right questions.
- So I would, you know, I'm trying to
- 15 corroborate that. But I think that what I take
- 16 away from these sorts of numbers as an
- 17 economist is 2013 in both cases looks a lot
- 18 like the average.
- 19 O. So then why did you state in your
- 20 report that, if you had included 2013, you
- 21 likely would have found a greater average value
- 22 for Sports programming?
- 23 A. I mean, because Dr. Crawford uses a
- regression methodology, that is probably more
- 25 analogous to my regression methodology. So my

- 1 best guess would be what happened to the other
- 2 regression. So I would conclude it would
- 3 likely be very close.
- I don't know what would happen, having
- 5 not had the data. But every one of these
- 6 indicators tells me I would continue to
- 7 corroborate.
- And if I had to, you know, guess, it
- 9 would just be a guess now, for the exact value,
- 10 I would say the other regression probably gives
- 11 me the best indicator of what would happen.
- 12 Q. So we shouldn't draw any significance
- from the fact that you included that footnote
- in your report?
- 15 A. I mean, obviously, you know, I was
- 16 making a point about what would happen to the
- 17 Sports share in particular, so that that number
- 18 would not be biased. And I think you should
- 19 say my best estimate is that the Sports share
- in 2013, if anything, would be a little bit
- 21 higher.
- But, again, my entire testimony, you
- 23 know, my point is does it or does it not
- 24 corroborate Bortz? And I think we see that
- 25 across all the different sources.

- 1 O. Okay. I want to ask you a few
- 2 questions about your programming data.
- You relied on a four-week sample of
- 4 programming data for each six-month accounting
- 5 period; is that right?
- A. 28 days, just to be clear, it is not
- 7 four weeks in a row. It is 28 days from --
- 8 from the six-month period.
- 9 O. Thank you. Four weeks worth of data?
- 10 A. Yeah.
- 11 Q. And you only had that data for three
- of the four years, 2010 through 2012?
- 13 A. Correct.
- 14 Q. And unlike the data that you were
- working with, Dr. Crawford's data set included
- 16 all of the programming data for all four years,
- 17 right?
- 18 A. That's my understanding. I haven't
- 19 been deep inside his data, but I think he
- 20 included all of the days and then categorized
- 21 them algorithmically or something. But beyond
- 22 that I have not investigated it.
- O. But your understanding is that he
- included all of the programming data for all
- 25 four years?

- 1 A. That's my understanding, yes.
- 2 Q. In your opinion, for the 2010 to '13
- 3 period, are the shares calculated by
- 4 Dr. Crawford more accurate than the shares that
- 5 you calculated in your direct testimony?
- A. I really don't know. He included more
- 7 days but used a different algorithm for
- 8 categorizing that I have not reviewed closely.
- 9 And my opinion, based on what I've
- seen, is that they are probably similar, but I
- 11 have not done a careful check of exactly how he
- 12 categorized things.
- 13 Q. So you have no opinion as to whether
- 14 his results are more accurate for the four-year
- 15 period than your results are for the four-year
- 16 period?
- 17 A. For the four-year period? Sorry.
- 18 Yeah, I mean, he includes 2013. So I wouldn't
- 19 put my results as having any categorization for
- 20 2013. So he gives an estimate for 2013 that I
- 21 don't.
- For 2010 through 2012, I am confident
- 23 that my categorizations are accurate, and I
- just -- I wouldn't put myself forward as having
- 25 reviewed his.

- 1 Q. So if we had to try and use one or the
- 2 other study or both studies to try and
- 3 determine valuations for the four-year period,
- 4 which is more accurate in your opinion?
- 5 A. I mean, again, he obviously has 2013
- 6 and I don't, but I -- I -- I don't feel that I
- 7 can give a relative comparison of mine versus
- 8 his because that's just not an analysis I've
- 9 done.
- 10 O. All right. Now I want to ask you some
- 11 questions about your analyses of the value per
- 12 hour of sports and other categories of
- 13 programming.
- 14 In your written direct testimony one
- of the things you did was to assess the
- 16 relative value per hour of sports programming
- 17 versus other types of programming. Right?
- 18 A. I mean, generally, yes. But are you
- 19 referring to some specific analysis?
- 20 Q. No, no. I am asking generally.
- 21 So did you look at that same metric
- value per hour of programming in the Bortz data
- 23 for WGN-only systems?
- A. Not that I recall, no.
- Q. So for WGN-only systems, the 2010 to

- 1 2013 Bortz surveys explicitly identified to
- 2 each respondent the number of hours of
- 3 compensable programming in each category,
- 4 right?
- 5 A. Sorry, could you repeat that?
- 6 Q. Yes. So for WGN-only systems, they
- 7 were given a special programming summary?
- 8 A. Yes.
- 9 Q. And the Bortz survey actually
- 10 explicitly identified to the respondents to
- 11 those surveys the number of hours of
- 12 compensable programming in each category,
- 13 right? Is that your understanding?
- 14 MR. LAANE: There is no foundation for
- 15 this line of questioning.
- 16 MR. CHO: Your Honor, the foundation
- is in the Bortz report, which he reviewed.
- 18 JUDGE BARNETT: I don't understand the
- 19 objection, Mr. Laane.
- MR. LAANE: He hasn't been here
- 21 testifying about the Bortz survey. I don't
- 22 know if there is any foundation to be asking
- 23 him about details like WGN programming summary.
- JUDGE BARNETT: Well, he has been
- 25 testifying at length about the Bortz survey.

- 1 Overruled.
- Whether he knows about the detail
- 3 underlying the Bortz survey, he can answer or
- 4 not answer. That's up to him.
- 5 THE WITNESS: So my recollection is
- 6 that there was a different -- information given
- 7 to people who were WGN-only systems. I don't
- 8 recall as I sit here whether it listed the
- 9 number of hours of compensable versus
- 10 non-compensable.
- I recall that it provided information
- 12 on that topic.
- 13 BY MR. CHO:
- Q. Okay. Well, based on your analyses of
- the value of programming per hour, what would
- 16 you expect the relative value of sports
- 17 programming per hour to be compared with the
- 18 relative value per hour of the other categories
- 19 of programming on WGN?
- 20 A. I mean, my general conclusion from my
- 21 analysis is that the value of sports
- 22 programming is higher per hour than of other
- 23 categories of programming. So I -- I think
- 24 that would apply to WGN.
- 25 My conclusions are based on that

- 1 finding overall.
- Q. How many times, roughly, greater?
- 3 Just very roughly would you expect sports
- 4 programming value per hour to be?
- 5 A. I mean, I don't have a specific number
- 6 times greater on one particular signal. It is
- 7 going to -- I have an overall number based on
- 8 like type of content that's in the distant
- 9 signals. And another overall number is based
- on the content that's on, say, TBS or TNT. But
- 11 I couldn't offer a number for the specific
- 12 content on one signal, a multiple.
- I mean, everything I have seen
- 14 indicates the sports content is many times more
- 15 valuable, but I couldn't offer an exact number
- 16 for one signal.
- 17 O. Well, the numbers that you present in
- 18 your report, what -- what were those about for
- 19 sports programming versus other programming?
- 20 A. I mean, it depends on which analysis.
- 21 It varies depending on the analysis.
- Q. Well, what analyses do you think are
- 23 most relevant to this proceeding where we're
- 24 trying to determine the value of sports
- 25 programming on, say, WGN?

1	A. I mean, so, for example, in the
2	regression analyses that look at values per
3	minute, I mean, you would have to compare
4	you know, it breaks it out by category. So you
5	would have to compare sports to a specific
6	other category.
7	But it's, you know, it's ten times
8	more than some, four times more than others.
9	It depends on the category. But it certainly
LO	shows sports value per minute being higher than
L1	the other categories.
L2	Q. Okay. Let's walk through an example
L3	survey response chosen and filed by the Joint
14	Sports Claimants on Friday. And this is
1.5	Exhibit 1118.
16	MR. CHO: And, Your Honors, this is a
17	restricted document.
18	JUDGE BARNETT: Is there anyone in the
19	hearing room who is not privy to confidential
20	information or who has not signed a
21	non-confidentiality agreement? I don't see
22	anyone. Thank you. Thank you, Mr. Cho.
23	(Whereupon, the trial proceeded in
24	confidential session.)

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- JUDGE BARNETT: We can reopen the
- 3 door.
- 4 BY MR. CHO:
- 5 Q. So it looks like the movies category
- 6 had the highest average Bortz survey value per
- 7 hour for WGN-only cable systems throughout the
- 8 four-year period, right?
- 9 A. It does. Again, movies are not very
- 10 many hours and I have not myself looked at them
- 11 separately before.
- But if we break out movies, it appears
- to have the highest computed value per hour.
- 14 Q. Right. And from 2010 to 2011 to 2012,
- 15 there was a big change in the number of movies
- that the respondents were supposed to be
- valuing, from 116.5 hours down to 49 hours and
- then down all the way to 9.5 hours, right?
- 19 A. Yeah, I see that, yes.
- 20 O. But the respondents' valuations in the
- 21 movie category don't look like they changed
- 22 that much, did they?
- 23 A. I don't know what we mean by "that
- 24 much." They stay roughly the same between the
- 25 first two years and then drop quite a bit to

- 1 the third year.
- Q. Okay. Well, in 2010 the average movie
- 3 valuation was 18.3 for the 116.5 hours of
- 4 movies?
- 5 A. That's what it says, yes.
- 6 O. And then the next year, there were
- 7 less than half the number of hours of movies
- 8 but the valuation actually goes up to 19.5,
- 9 right?
- 10 A. That's what it says, yes.
- 11 Q. And then in 2012, there were less than
- ten hours of movies, but the valuation only
- fell to 10.1, not even a 50 percent drop?
- 14 A. Right. I mean, I don't know anything
- about the underlying movies that were being
- 16 shown, but, yes, it appears that whatever that
- 17 set of movies was, the value was similar in the
- 18 first two years and then the number of movies
- 19 dropped and the value dropped, but not by as
- 20 large a percentage.
- 21 Q. The respondents didn't know what
- 22 movies were being shown either, because they
- were given that card that just said movies,
- 24 right?
- 25 A. I mean, the respondents are reporting

- on their valuation of the movies given their
- 2 overall set of content. I don't know actually
- 3 what they know about what was available in
- 4 different years, on WGN or otherwise.
- 5 Q. Well, didn't Mr. Trautman say that the
- 6 reason he needed to provide that programming
- 7 summary was because they didn't necessarily
- 8 know what's compensable and what's not, which
- 9 movies were compensable and which weren't on
- 10 WGN in those years?
- 11 A. I really don't know what he said on
- 12 that topic. I do know, my recollection is he
- indicated he wanted to provide clarity on the
- 14 compensability question. But I don't know what
- 15 he said specifically.
- 16 Q. Okay. To your knowledge, did movies
- 17 get that much more valuable from 2010 to 2012?
- 18 A. I really don't know.
- 19 Q. Sports value per hour is about
- 20 one-fifth of movies value per hour, followed
- 21 closely by Devotional programming.
- 22 Is that consistent with your analysis
- 23 of the value per hour of sports programming?
- 24 A. Where are we looking on here?
- Q. We have highlighted the numbers which

- 1 are just the -- the averages for the four-year
- 2 period.
- 3 A. Oh.
- 4 Q. And movies had an average value per
- 5 hour of .72. Sports had an average value per
- 6 hour of .13. And Devotional had an average
- 7 value per hour of .09.
- 8 So is that consistent with your
- 9 analysis of the value per hour of sports
- 10 programming?
- 11 A. Again, I have never done a comparison
- of sports to movies. So what I see here, if I
- were to do the analysis I have done, is that
- 14 sports is higher than syndicated, news, or
- 15 Devotional.
- 16 I have never done sports as syndicated
- 17 exactly either, but I have done sports to
- 18 Program Suppliers, which obviously is mostly
- 19 syndicated when you rolled those together.
- 20 So the ratios are different than what
- 21 I found in -- in, you know, depending on which
- 22 analysis, including a different set of systems
- and content, but the overall ranking looks the
- 24 same.
- I mean, not the same in order, but you

- 1 asked me about sports in particular.
- Q. So you said that you don't have
- 3 experience in movies. If we put that aside, do
- 4 the ratios between sports, syndicated programs,
- 5 news programs and Devotional programs, do those
- 6 ratios of the value per hour for those
- 7 categories look consistent with your
- 8 experience?
- 9 A. Consistent? I mean, again, sports is
- 10 highest. Devotional is higher than it was in
- 11 the regressions, as I indicated, you know, I
- thought it probably was, given that the
- 13 regressions don't always do as well with some
- 14 of the lower value categories.
- The regressions are, you know, my
- 16 regressions are really weighted to give more
- 17 weight to the larger dollar systems because
- 18 they pay in more dollars.
- 19 So the ratios are certainly in a, you
- 20 know, have sports first, otherwise the order is
- 21 somewhat different and the relative values are
- 22 somewhat different.
- 23 Q. But you didn't even just use your
- 24 regression analysis to come to these
- conclusions about the value per hour of sports

- 1 programming, did you? I mean, you also looked
- 2 at, for example, TNT, TBS, other data on the
- 3 relative value of sports programming per hour
- 4 and specifically the magnitude of the
- 5 difference, right?
- 6 A. Yeah, that's fair.
- 7 Q. So are these valuations consistent
- 8 with that analysis?
- 9 A. I mean, they are consistent with the
- 10 fact that an hour is not an hour. It depends
- on the type of programming, and that sports is
- 12 the highest. But this particular set of sports
- and these systems, the ratio is not as large as
- it is in some of my other analyses.
- 15 Q. In fact, it is substantially
- 16 different, isn't it?
- 17 A. The ratio -- the ratio here between,
- 18 say, Sports and other types of programming is
- 19 different than it is for, you know, the TBS or
- 20 TNT analysis or my regressions. Again, each of
- those has a different set of content.
- 22 So the way to think about this is that
- 23 each analysis tells you an hour is not an hour.
- 24 It depends on what type of programming. Sports
- 25 tends to have the most value.

- 1 If you want to think about the full
- 2 set of systems and the relevant set of content
- 3 here, you go to something like my regression or
- 4 Bortz that looks at the full set of systems and
- 5 the content here.
- At no point am I applying a ratio from
- 7 one of my analyses to some other set of
- 8 content.
- 9 Q. Okay. So you are saying that, you
- 10 know, we shouldn't be looking at your analyses
- on TNT or TBS because that was a different type
- of programming than this; is that right?
- 13 A. I am saying you should take two things
- 14 from those analyses. Most importantly, that an
- 15 hour is not an hour, that you have to think
- 16 about what kind of content it is.
- 17 And, secondly, that consistently
- 18 across the different sources, and I think
- 19 generally known in the industry, sports tends
- 20 to have a higher value per hour. Those are the
- 21 two things I would take out.
- I mean, I want to be clear that I
- don't think -- at no point would I say you
- 24 should take the TBS multiple and apply it to
- 25 the content at issue in this case. I think you

- 1 should say an hour is not an hour and that a
- 2 large body of evidence says sports hours tend
- 3 to be more valuable than other types of hours.
- Q. Would you say that your research on
- the value per hour of programming corroborates
- or refutes or some other word when compared
- 7 with the Bortz valuations per hour of
- 8 programming on WGN-only systems?
- 9 A. I mean, again, ultimately my analysis
- 10 is value per minute times minutes across the
- 11 full set of content.
- 12 So the fact that when I take a value
- 13 per minute and multiply it by the actual
- 14 minutes I get shares that look a lot like Bortz
- overall means that it's corroborating the Bortz
- 16 shares.
- 17 To the extent underlying the Bortz
- shares there is people in their heads doing how
- 19 many minutes times value per minute, the match
- 20 in the overall shares indicates that my
- 21 analysis is corroborating what the Bortz survey
- 22 found, only when applied to the full set of
- 23 content and only when thinking about that
- 24 bottom line share calculation.
- 25 O. I know you want to talk about the

- 1 bottom line share calculation, but the fact is
- 2 you did an analysis of the value per hour of
- 3 programming, sports programming, relative to
- 4 other types of programming, right?
- 5 A. I did a regression analysis that
- 6 computes a value per minute as a way to compute
- 7 a bottom line share. Right? But if the value
- 8 per minute, I mean, underlying the Bortz shares
- 9 there are minutes of programming and valuations
- 10 per minute.
- The minutes of programming underlying
- 12 Bortz and the minutes of programming underlying
- my regression, it's the same content. Right?
- So if my overall bottom line matches,
- it means that it is matching the -- when you
- 16 add the valuation piece.
- 17 Q. But the -- so maybe in your opinion
- 18 the bottom line matches, but does the halfway
- 19 point, the value per hour or value per minute,
- 20 does that match between your analysis and the
- 21 Bortz survey?
- 22 A. I mean, again, for 2012 through --
- 23 2010 through 2012, which is what I looked at,
- it is the same underlying content.
- 25 So if the same underlying content is

on these signals, there is so many minutes of 1 each type of programming, so --JUDGE STRICKLER: The subset that 3 counsel is showing you that's on the screen is WGN-only systems. 5 THE WITNESS: Correct. JUDGE STRICKLER: The fact that those numbers, that subset is so different than what 8 was in the overall Bortz survey and in your 9 regression, does that suggest to you that there 10 must be something different from the WGN-only 11 12 systems in the minds of the CSOs that would account for that difference? 13 14 THE WITNESS: I mean, certainly their valuations for that specific set of systems are 15 different. I haven't -- I mean, I don't want 16 to oversell what I have done. I haven't dived 17 into these specific systems and their 18 valuations. I mean, the bottom -- the overall 19 set of valuations comes out similar, 20 incorporating these. 21 22 But I would agree that these -- some 23 of these are different and in some cases quite

different from the overall average. And my

focus has been on the overall average.

24

- 1 JUDGE STRICKLER: Because your focus
- 2 wasn't on this subset, you can't opine as to
- 3 why this subset is different?
- 4 THE WITNESS: I honestly don't know
- 5 why this subset is different.
- JUDGE STRICKLER: Okay.
- 7 BY MR. CHO:
- 8 Q. In your opinion, are the Bortz survey
- 9 responses reliable measures of the value per
- 10 hour of compensable programming on WGN?
- 11 A. My opinion is that the Bortz survey
- 12 responses are reliable measures of the overall
- 13 value of the programming.
- I don't know -- and, therefore, as I
- 15 have said, reliable measures sort of by math of
- the overall value per hour of all of the
- 17 content.
- 18 Q. But you said you are not a survey
- 19 expert, right?
- 20 A. I am an expert on the marketplace data
- 21 that indicates that the marketplace data
- 22 corroborates what is in Bortz.
- Q. Isn't it true that the Bortz survey
- 24 respondents for WGN-only systems were the only
- 25 Bortz respondents who were actually given

- 1 detailed programming data for the distant
- 2 signals they were valuing?
- 3 A. That's consistent with my
- 4 recollection. I don't, again, now we're into
- 5 details of what instructions were given to each
- 6 that are not all crystal clear in my head as I
- 7 sit here, but my recollection is there were
- 8 instructions that were given to the WGN-only
- 9 systems in particular.
- 10 Q. Those are the systems we have been
- 11 talking about?
- 12 A. Yes.
- 13 Q. And, In fact, the only programming
- 14 information given to all of the other Bortz
- 15 respondents was the call sign of the station?
- 16 A. That I just don't recall.
- 17 Q. So the only -- the WGN-only
- 18 respondents we have been talking about had the
- 19 most programming information of all the Bortz
- 20 respondents. Is that fair to say?
- 21 A. Again, I'm sure other people can
- 22 characterize the survey details more than I
- 23 can. My recollection is the WGN-only systems
- 24 were given some additional information, yes.
- MR. CHO: Okay. I pass the witness.

1 JUDGE BARNETT: Thank you, Mr. Cho.

- 2 Mr. MacLean, you look poised, I mean, and
- 3 ready.
- 4 MR. MacLEAN: Always poised.
- 5 JUDGE BARNETT: Always poised.
- 6 CROSS-EXAMINATION
- 7 BY MR. MacLEAN:
- 8 Q. Good morning, Dr. Israel. I am
- 9 Matthew MacLean. I represent the Settling
- 10 Devotional Claimants.
- 11 A. Good morning.
- 12 O. I first want to start out with some
- 13 common ground, and I'd like to show you your
- 14 direct testimony, Exhibit 1009, at page 9.
- 15 A. Do you want me to turn to that or is
- 16 it coming on the screen?
- MR. LAANE: Do you mean 1003?
- 18 MR. MacLEAN: I think it is 1003.
- 19 Yes, thank you. 1003.
- THE WITNESS: At page 9?
- 21 MR. MacLEAN: Page 9, 1003.
- 22 THE WITNESS: I got it.
- MR. MacLEAN: Apparently we have to
- 24 boot up a computer or something.
- 25 BY MR. MacLEAN:

- 1 Q. Okay. So taking a look at this quote
- 2 at the top of the page --
- 3 A. That's helpful. Thanks.
- 4 Q. And this is actually a quote from a --
- from an opinion of the Judges' predecessors,
- 6 the Copyright Arbitration Royalty Panel; is
- 7 that correct?
- 8 A. It looks like it is from their report
- 9 in May of 1996.
- 10 Q. And you say, "the critical
- 11 significance of the Bortz survey is the
- 12 essential question it poses to cable system
- operators, that is: What is the relative value
- of the type of programming actually broadcast
- in terms of attracting and retaining
- 16 subscribers? That is largely the question the
- 17 Panel poses when it constructs a simulated
- 18 market. Further, the question asks the cable
- 19 system operator to consider the same categories
- we are presented here in the form of Claimant
- 21 groups, that is, sports, movies, and the
- 22 others. That is also what the Panel must do."
- Now, even though you put this, this
- 24 language in the words of the CARP, is this also
- 25 your opinion about the Bortz survey?

- 1 A. Generally, yes. There is maybe some
- 2 specific words I would write differently but
- 3 generally yes.
- 4 Q. And is it your opinion that the Bortz
- 5 survey is the best methodology presented for
- 6 the valuation of the -- of the program
- 7 categories in this proceeding?
- 8 A. That's my opinion, yes.
- 9 JUDGE STRICKLER: Are you saying the
- 10 Bortz survey is the best survey or that survey
- 11 -- the survey approach is the best approach?
- 12 THE WITNESS: I think the Bortz
- 13 survey, I mean, again, my guiding principle
- 14 here in evaluating the surveys is how well they
- 15 match the marketplace data.
- 16 And so I think the -- I think two
- 17 things: The survey, I do agree, is asking
- 18 exactly the right question and then the survey,
- 19 the Bortz survey in particular, appears to
- 20 match the marketplace data better than the
- 21 Horowitz survey, which is the other one I'm
- 22 aware of.
- 23 JUDGE STRICKLER: So your measure of
- 24 whether a survey is accurate is whether it
- 25 matches the marketplace data that you calculate

- 1 through your regression?
- THE WITNESS: And I would also include
- 3 the Crawford regression and things like that.
- 4 But, yes, I mean, at least I think I would say
- 5 what I can add to the discussion is a
- 6 comparison to the marketplace data.
- 7 JUDGE STRICKLER: Thank you.
- 8 BY MR. MacLEAN:
- 9 O. But Bortz is best, is what you would
- 10 say?
- 11 A. I mean, I would say what I say here,
- 12 yeah, I think it is the best thing we have
- available, given the question that it asks and
- 14 given that, again, what I can add in my
- 15 expertise is how well it matches the
- 16 marketplace.
- 17 Q. And, of course, for this proceeding,
- 18 Bortz, some improvements have been made to the
- 19 Bortz survey methodology; is that right?
- 20 A. That's my understanding, yes.
- 21 Q. So would you say the best of the best
- 22 got better?
- 23 A. I mean, I really have not been
- 24 involved in previous proceedings. So I -- I
- 25 can't really comment on Bortz in previous

- 1 proceedings.
- 2 Q. So let me, since we just referenced
- 3 PTV, let me talk a little bit about what Mr.
- 4 Cho went through with you.
- 5 And I am going to -- could I have the
- 6 ELMO, please? I am going to put up my very
- 7 slick graphic here.
- 8 And this is what Mr. Cho showed you
- 9 with regard to the Bortz survey breakdown
- 10 computed into a value per hour for WGNA-only
- 11 systems.
- Do you -- do you remember these
- 13 numbers that Mr. Cho just showed you?
- 14 A. Yes.
- 15 O. Roughly? Okay. So one thing you can
- 16 see here is that for WGNA-only systems -- first
- 17 of all, would you regard WGNA-only systems as
- 18 being a representative sample of the universe
- 19 of systems out there?
- 20 A. No, I have no reason to think it is
- 21 representative. That's why I kept stressing it
- 22 was just results for that subset.
- Q. And you can see that here, the
- 24 Devotional category, if you compute it into a
- value per hour approach, the Devotional

- 1 category is somewhat higher than, for example,
- 2 the news category. Is that right?
- 3 A. Yeah, on this value per hour
- 4 calculation, yes.
- 5 Q. Now, if WGNA -- if WGNA is made
- 6 available, unlike many stations, on a
- 7 nationwide basis, would you expect -- I believe
- 8 the example that Mr. Cho showed you was from
- 9 Louisiana -- would you expect people,
- 10 subscribers in Louisiana, to be particularly
- 11 interested in Chicago news?
- 12 A. I don't know. I'm sure many of them
- 13 aren't. Some of them may be.
- 14 Q. Do you have any -- any expectations
- 15 about the level of religiosity in -- in the
- 16 Louisiana area?
- 17 A. I really don't know.
- 18 Q. Okay. With regard to sports, is it --
- is it possible that nationwide, on a signal
- 20 like WGNA, that nationwide people might be less
- interested in Chicago area sports than, for
- 22 example, people living in the Chicago area?
- 23 A. I mean, I imagine that's true among
- 24 viewers. Again, as I stress in my testimony, I
- 25 think we should be talking about what CSOs

- 1 value to put on their systems.
- 2 But if your point is there is
- 3 differences in sports preference nationwide
- 4 relative to a particular city, I agree with
- 5 that.
- Q. And, of course, you have stressed a
- 7 number of times that number of hours is not
- 8 really a measure of value. Would you agree
- 9 with that?
- 10 A. Yes.
- 11 Q. So is it possible, for example, that
- 12 cable systems might put a certain degree of --
- 13 that there might be some nonlinearity in the
- valuation that cable systems put onto programs?
- 15 Maybe a little bit of Devotional programming
- 16 goes a long way. Is that possible?
- 17 A. I mean, sure, it's possible. I don't
- 18 know in particular. But my experience in the
- 19 industry is there is not a great linkage
- 20 between hours and value.
- 21 And sometimes it can be that you want
- 22 a small amount of some different content to
- give that option to your viewers, that that can
- have value, a lot of value to people.
- 25 Q. Even -- even very religious people,

- 1 how many hours a week would you ordinarily
- 2 expect them to spend in church?
- 3 A. I don't know. I mean, if I was doing
- well, it would be an hour, but I don't know
- 5 beyond that.
- JUDGE STRICKLER: Is this a subject of
- 7 your expertise?
- 8 (Laughter.)
- 9 THE WITNESS: No.
- 10 BY MR. MacLEAN:
- 11 Q. Mr. Cho also pointed out that the
- 12 Bortz survey respondent -- Bortz survey
- 13 questionnaire very helpfully pointed out that
- 14 the Devotional programming at issue was early
- on Sunday mornings, like 5:30 a.m. Is that
- 16 right?
- 17 A. Yes.
- 18 Q. And in Chicago, when it is 5:30 a.m.
- 19 in Chicago, what time is it on the West Coast?
- 20 A. Also not an area of my expertise, but
- 21 I believe it is 3:30.
- Q. And what time is it on the East Coast?
- 23 A. 6:30.
- Q. Okay. So it varies across the
- 25 country, right?

- 1 A. Yes.
- Q. Okay. Let's take a look at your -- so
- 3 now that we have gone through the best of the
- 4 Bortz, let's take a look at the -- your
- 5 regression specification, which is Israel
- 6 direct, page B-13.
- 7 Now, we're all very comfortable now
- 8 looking at regression specifications, having
- 9 seen a few. But I just want to make a couple
- 10 of points about yours.
- 11 Yours -- this regression specification
- is in the functional form of a linear
- 13 regression; is that right?
- 14 A. Yes.
- 15 O. And here you have the level number of
- 16 total royalty fees paid by the CSOs your
- 17 dependent variable, right?
- 18 A. That's correct.
- 19 Q. And then you -- your -- your
- 20 specification essentially assumes that that
- 21 total royalty fee amount is going to vary as a
- level function of each of your control
- 23 variables. Is that right?
- A. I don't think I would say it assumes
- 25 it will vary in that way. I think I would say

- 1 that the regression finds the best linear
- 2 function to predict the royalty fee.
- Q. Okay. But you are not looking for any
- 4 sort of non-linear function here, right?
- 5 A. That's correct. It is consciously
- 6 measuring the relationship between dollars and
- 7 levels, and these other variables measured in
- 8 levels.
- 9 So it is intentionally looking for the
- 10 best linear predictor, because that's the
- 11 economic functional form that I considered most
- 12 relevant.
- 13 Q. Okay. Now, if you look down to where
- 14 you have beta 9, that's your coefficient for
- 15 number of subscribers from previous accounting
- 16 periods, right?
- 17 A. That's correct.
- 18 Q. Okay. So this -- this -- what you are
- 19 expecting to see or what this -- this
- 20 specification essentially assumes is that the
- 21 total royalty fee paid by the CSO bears a
- 22 linear relationship with the number of
- 23 subscribers from previous accounting periods;
- 24 is that correct?
- 25 A. I mean, again, the way I view these

- 1 regressions, I don't think it is making an
- 2 assumption about. I think it is saying it is
- 3 going to find the best linear predictor, the
- 4 best linear relationship it can find.
- 5 Q. Okay. Now, why would you control for
- 6 the linear number of subscribers in a
- 7 level/level relationship with the level number
- 8 -- level royalty fee paid by the CSO?
- 9 A. I mean, my most basic reason for
- 10 almost every specification decision was to be
- 11 consistent with what had been done previously.
- But when I evaluated it, again, I
- 13 think it is reasonable to ask for, as the
- 14 number of subscribers goes up, you know,
- looking for the best linear relationship, so
- 16 looking for how much the bid in 9 would
- 17 multiply how much more you would pay in
- 18 royalties.
- 19 So it is pretty common in regressions
- 20 to sort of look for these sorts of linear
- 21 relationships letting the coefficient multiply
- 22 up the number of subscribers.
- 23 Q. And your goal here by including this,
- this control variable, is to essentially remove
- 25 the influence of the number of subscribers of

- the system on the total royalty fees paid so
- you can look at what you are trying to see
- 3 through your -- through your other
- 4 coefficients; is that right?
- 5 A. I think it is to control for the
- 6 number of subscribers. I mean, in combination
- 7 with the other control variables, I think it is
- 8 controlling for the size of the system.
- 9 Q. Are you -- are you concerned that
- 10 using the level number of subscribers with the
- 11 level royalty fee paid is simply replicating
- the royalty fee calculation?
- 13 A. No, not at all. For purposes of the
- 14 size calculation, I would like to, you know,
- 15 measure the way that size affects the formula.
- 16 Q. That's the goal, right, to include --
- 17 to include a control for number of subscribers
- 18 that correctly models how it -- how number of
- 19 subscribers would affect the total royalty fee
- 20 paid; is that right?
- 21 A. I mean, I would say the goal is to
- 22 control for the number of subscribers. Again,
- 23 I have consciously maintained a linear
- relationship because it has been used before.
- 25 It is very standard in regressions.

- But, yes, I would agree the goal is to
- 2 control for the number of subscribers.
- 3 Q. Now, I see you also have a control at
- 4 beta 7 for other prorated minutes; is that
- 5 right?
- 6 A. Right. That's minutes that couldn't
- 7 be classified into one of the categories. I
- 8 think generally because I just didn't have data
- 9 in the data I used.
- 10 Q. Have you -- have you considered what
- 11 the effect of the regression would have been if
- 12 you had included a control for total minutes or
- total prorated minutes instead of other minutes
- or other prorated minutes?
- 15 A. I mean, I haven't done that. My
- 16 expectation as I sit here is that it wouldn't
- 17 change anything.
- 18 Q. Well, wouldn't a control for total
- 19 minutes mean that you are measuring the average
- 20 contribution of one category versus taking away
- 21 the average contribution of whatever is in your
- 22 category of "other"?
- 23 A. I mean, that's fair. You would have
- 24 to interpret the coefficients correctly. So
- 25 another minute of, say, Program Supplier would

- add one to the total and one to Program
- 2 Suppliers. So you would have to do the math.
- 3 But I don't -- I don't -- if you did the math
- 4 right, I don't think it would change the
- 5 regression meaning.
- 6 Q. Well, it would change the meaning of
- 7 the coefficients, right?
- 8 A. An individual coefficient would change
- 9 but you would still have the same information
- 10 in the regression.
- 11 Q. You would just have to do some algebra
- 12 to draw that information out?
- 13 A. Yeah. I think it is arithmetic but,
- 14 yeah, you would have to do some math to draw it
- 15 out.
- 16 Q. Fair enough. Okay.
- 17 So let's take a look now at your
- 18 regression results. That's Exhibit 1003, page
- 19 18, tab V-1.
- 20 A. Okay.
- Q. So these, in your view, as I
- 22 understand it, these, these coefficients, these
- 23 regression coefficients, are representative of
- 24 -- and I believe you are now saying average
- 25 value per minute. Is that your -- is that your

- 1 view?
- 2 A. Yes. I mean, I think they are
- 3 measuring the average value per minute across
- 4 the systems and the data.
- 5 Q. And you have positive coefficients for
- 6 Sports, Program Suppliers, Commercial
- 7 Television and Public Broadcasting; is that
- 8 right?
- 9 A. Yes.
- 10 Q. And then for -- you have negative
- 11 coefficients for Canadian, Devotional, and
- 12 network programming; is that right?
- 13 A. Yes.
- 14 Q. And I see that it is actually most
- 15 strongly negative, your coefficient is the most
- 16 negative with regard to network programming.
- 17 Is that right?
- 18 A. That's right. We had some discussion
- 19 of that before, that it is important to
- 20 remember that programming is likely duplicative
- of the network programming from the local
- 22 broadcast station.
- Q. Well, in some markets it is
- 24 duplicative, right?
- 25 A. Yes.

- 1 Q. Some markets, for example, have an NBC
- 2 station, right?
- 3 A. Yes.
- 4 Q. And you would expect those markets to
- 5 be less likely to import an NBC signal on the
- 6 whole; is that right?
- 7 A. I mean, I guess all else equal. I
- 8 don't know what else they may be importing the
- 9 signal for.
- 10 Q. And then some markets might not have
- an NBC station of its own, right?
- 12 A. I suppose that's possible. I don't
- 13 know the counts of how many have the network.
- 14 Q. I am not asking the count. Some
- 15 markets do have an NBC station. Some markets
- 16 do not. Is that correct?
- 17 A. I think most do. But it seems right
- 18 to me there could be some smaller markets that
- 19 didn't.
- 20 Q. And if there is a smaller market that
- 21 doesn't have an NBC station, that might be very
- 22 valuable to -- to import an NBC station; is
- 23 that right?
- 24 A. For that particular market, that
- 25 sounds right.

- 1 O. And if those markets that are
- 2 importing that NBC station tend to be small
- 3 markets with very low fee-paying systems, you
- 4 would expect the importation of that NBC system
- 5 to actually reduce the coefficient for network
- 6 programming, for example; is that right?
- 7 A. I mean, I would expect the size of the
- 8 system to be controlled for by the control
- 9 variables we talked about before.
- 10 Q. Well, let's -- let's -- let's put
- aside the number of subscribers because that's
- only one component that goes into the amount of
- 13 receipts that a system has. Is that right?
- 14 A. Right. That's why I said before that
- 15 I -- when you were asking me questions, that I
- 16 consider the full set of controls to be
- 17 relevant, not just the number of subscribers.
- 18 Q. Okay. Well, you don't have a control
- 19 for the amount of receipts of the system; is
- 20 that right?
- 21 A. That's right. I mean, I stuck to what
- 22 had been done before. So I have things like
- 23 subscribers, number of channels, median income,
- 24 various -- count of broadcast channels,
- 25 multiple controls that I think are measures of

- 1 size.
- 2 Q. Okay. So let's assume all your
- 3 controls are working as intended for a moment.
- 4 Okay?
- If you have a system that has a lower
- 6 -- that is a lower fee-paying system, importing
- 7 a network station, all else being equal, would
- 8 that tend to increase or decrease the
- 9 coefficient for network programming?
- 10 A. I mean, I don't -- again, you say the
- 11 controls are working as intended, so the
- 12 controls should, therefore, be soaking up the
- 13 effect of size.
- 14 So I would think that that additional
- 15 indicator would be measuring the value of the
- 16 programming to the best of the regression's
- 17 ability, not measuring size.
- 18 Q. Well, what does a negative coefficient
- 19 mean then?
- 20 A. We talked about this some. I think
- 21 the negative coefficient -- as we just
- 22 discussed, there are likely, in the case of
- 23 network, there are likely systems importing
- 24 network programming that don't really value the
- 25 network programming per se.

- 1 And so it could well be that, in the
- 2 case of network, the value on the network
- 3 programming per se is negative.
- 4 Q. Okay.
- 5 A. That would show up in the regression
- 6 as saying relatively -- given the type of
- 7 program we're talking about, relatively few
- 8 systems are paying for it because they already
- 9 have a duplicative, another network source.
- 10 Q. Well, it doesn't say anything about
- 11 the number of systems that are paying for it.
- 12 It says something about how much those systems
- 13 are paying. Isn't that right?
- 14 A. Right. I think that's fair. But I am
- just saying you don't see -- if there was no
- 16 duplicative network programming, then you might
- 17 expect to see in the data lots of systems
- 18 bringing in network programming, even though it
- 19 cost a lot of money.
- 20 And the fact that you don't see that,
- 21 I think, is driven by the fact that there is,
- in fact, duplicative network programming.
- Q. Okay. I am putting up another very
- 24 slick graphic where we're going to graph fees
- 25 against minutes of some category of

- 1 programming. Okay?
- 2 A. Okay.
- 3 Q. Let's say network programming. All
- 4 right?
- 5 A. Okay.
- 6 O. So what -- first of all, you have a
- 7 negative, a negative coefficient here. So how
- 8 would I draw my -- my regression line here?
- 9 A. Holding everything else constant and
- 10 just drawing that particular part of the line,
- 11 it would slope downward. So you would start
- 12 high and go down.
- 13 Q. And I could only draw a straight line
- 14 because you used a level/level regression
- 15 specification, right?
- 16 A. It is a linear regression, yes.
- 17 Q. Linear regression. Okay. So where do
- 18 you expect the data to fall? If I have got a
- 19 low number of minutes of network programming,
- where do I -- where would the -- I mean, this
- 21 regression line would suggest that people with
- low numbers of minutes of network programming
- 23 are paying a lot of fees, right?
- 24 A. I mean, all else equal, everything
- 25 else held fixed, which is a lot of other

- things, then the low number of network minutes
- 2 would tend to correspond to a higher number, a
- 3 higher amount of fees.
- 4 O. And then those systems that are paying
- 5 lower amounts of fees are, according to your
- 6 regression, all else being equal,
- 7 retransmitting more minutes of network
- 8 programming. Is that right?
- 9 A. I mean, I agree all else equal. But
- 10 the all else equal matters a lot because there
- are other control variables in the regression.
- 12 Q. I agree. So what this, your
- 13 regression is really showing is that those
- 14 systems that are retransmitting a lot of
- 15 network minutes are paying comparatively low
- 16 fees, correct?
- 17 A. All else equal, I think that's right,
- 18 yes.
- 19 Q. And if these systems that are -- that
- 20 are retransmitting a lot of network minutes,
- 21 but paying low fees, decide they want to --
- let's say they get an NBC station in their
- area, and they decide to start to drop that
- 24 network programming.
- What would that do to your

- 1 coefficient, if these systems that pay, that
- 2 pay low fees start retransmitting fewer minutes
- of Devotional -- I mean, I'm sorry, of network
- 4 programming? You can see where I'm going next.
- 5 A. I mean, I would need, holding
- 6 everything else fixed, you are right about
- 7 which way the relationship goes, right. But
- 8 everything else is not held --
- 9 Q. I didn't say which way the
- 10 relationship goes. I'm actually asking you
- 11 this.
- 12 A. And then holding everything else
- 13 fixed, the way I would say it is on average in
- 14 the data, holding everything else fixed, a
- 15 smaller number of network minutes tends to be
- 16 associated with higher fees and vice versa.
- 17 Q. And if those systems that are paying
- 18 lower fees start dropping the network minutes
- 19 that they are carrying, will that tend to
- 20 reduce or raise the coefficient?
- 21 A. Reduce or raise the coefficient or the
- 22 payment?
- 23 O. The coefficient. Your coefficient.
- 24 If these systems out here (indicating) drop
- 25 their network -- their network minutes, what's

- 1 that going to do to the coefficient; make it
- 2 more negative or more positive?
- 3 A. I mean, mechanically -- I don't know,
- 4 actually. It depends on where they are and how
- 5 they line up, what the residual is relative to
- 6 the line.
- 7 I mean, their minutes would go to
- 8 zero. But maybe I should, and maybe I am just
- 9 not seeing it as I sit here, but if you take a
- 10 particular system, I think you would have to
- 11 know where it sits relative to the line to know
- 12 what it would do to the coefficient.
- 13 Q. Well, I'm just saying let's say we
- just take all these out. Okay? We're just not
- 15 going to have any -- any data points over here
- 16 because all the -- all of the low fee-paying
- 17 systems out there said: Forget it. We're sick
- 18 of this network programming. We don't like it.
- 19 It has negative value. We're getting rid of
- 20 it.
- Now, if all you have left are these
- 22 high fee-paying systems with few minutes of
- 23 network programming, where is your regression
- line going to be then?
- 25 A. I mean, it depends on the slope of

- 1 those dots that you have left.
- 2 Q. These are the only dots I have. These
- 3 are the only -- yeah, it depends on the slope
- 4 of the dots.
- 5 A. And that looks relatively flat the way
- 6 that you have drawn it.
- 7 Q. Okay. So you would have a flat
- 8 regression line, right?
- 9 A. I mean, the way you have drawn the
- 10 dots, I think so, but I don't know what the
- 11 slope of those dots actually is in practice.
- 12 Q. So really when you see a regression
- 13 line sloping downward, what that is saying is
- 14 that lower fee-paying systems are
- 15 retransmitting more of that kind of
- 16 programming; isn't that right?
- 17 A. No, because all else is held constant.
- 18 And you can't just make a bivariate
- 19 relationship statement from a multivariate --
- there is lots of variables in the regression.
- Q. Well, I only have two dimensions to
- 22 work with on the paper.
- 23 A. And, therefore, you can't make the
- 24 statement that you are trying to make. The
- 25 statement that I would say is that, given that

- 1 we're holding size constant, it is telling me
- that, when I see a network of a given size, the
- ones that have some network programming tend to
- 4 be ones that pay lower fees.
- 5 One interpretation of that would be
- 6 that they are only going to bring in the
- 7 network programming if it is relatively
- 8 inexpensive, given where they are on the
- 9 royalty payment, because it is not worth that
- 10 much to them to bring network programming in
- 11 because a lot of them have a duplicative
- 12 source.
- 13 O. And another -- and another
- interpretation would be that if it's a lower
- 15 fee-paying system, they are more likely to be
- in a market that doesn't have its own network
- 17 programming and, therefore, values that network
- 18 programming, wouldn't that be?
- 19 A. I don't think that's a valid
- 20 conclusion given the other controls in the
- 21 regression.
- 22 O. Well, what control would -- you have
- 23 pointed out your distant subscriber control
- 24 variable -- I mean, I'm sorry, your number of
- 25 subscriber control variables.

- 1 What other control?
- 2 A. Number of channels. Program systems
- 3 in smaller markets tend to carry fewer
- 4 channels. Number of broadcast channels is
- 5 directly controlled for in the regression,
- 6 which is part of your story. Median income.
- 7 These are all things that are getting
- 8 at the receipts that a system pays so that you
- 9 can't -- what you are trying to say is that
- 10 minutes of network programming or other types
- of programming must be proxying for size, but
- there are multiple control variables that are
- 13 measuring size.
- 14 So this is all conditional on those
- 15 control variables, which changes the whole
- 16 story.
- 17 Q. In your review of the data, have you
- 18 seen that there are, in fact, distantly
- 19 retransmitted stations out there that have
- 20 substantially all Devotional minutes?
- 21 A. I don't know about substantially all.
- 22 I -- I -- I just don't know.
- Q. You haven't seen one way or the other?
- 24 A. I don't. I mean, I think I -- no, I
- 25 just don't know. I mean, I believe there are

- 1 signals that transmit substantially more
- 2 Devotional than others. But substantially all,
- 3 I just don't know.
- 4 O. If -- if a -- if a station that was
- 5 substantially all Devotional minutes was
- 6 retransmitted at all, would that be
- 7 inconsistent with the notion that those minutes
- 8 have negative value per minute?
- 9 A. I mean, it would depend on -- I don't
- 10 know the financial arrangements behind it
- 11 rebroadcasting.
- I mean, look, I think generally the
- fact that people carry and transmit Devotional
- 14 programming means Devotional programming has
- some positive value, which is why I take my
- 16 results on Devotional to say that number is low
- 17 but not zero and, therefore, have supported the
- 18 Bortz survey as a measure.
- 19 Q. In fact, a negative coefficient could
- 20 be an indicator of positive value, if it shows
- 21 that smaller -- that smaller fee-paying systems
- are choosing to retransmit that programming.
- 23 Isn't that true?
- 24 A. Again, I don't think that's a valid
- 25 interpretation from a regression that has

- 1 multiple controls for size.
- Q. You can't say it is not a valid
- 3 interpretation?
- A. I think I can, because the regression
- is designed to have multiple controls for size.
- 6 So we have to take all of those measures of
- 7 size out.
- 8 Your implication in your drawing could
- 9 well go the other way. Once you have got these
- 10 other controls for size in there, the presence
- of a Devotional signal probably doesn't tell
- 12 you much about size, and certainly can't tell
- 13 you it's small because they have already
- 14 directly controlled for that.
- 15 O. And I will ask you the same question
- 16 with respect to Canadian. If it were the case
- 17 that systems within the Canada zone tended to
- 18 be smaller, on average, tend to have lower
- 19 fees, lower receipts and lower fees on average
- than systems elsewhere in the country, that
- 21 could create in your regression a negative
- 22 coefficient for Canadian programming, couldn't
- 23 it?
- 24 A. Again, I think that the controls for
- 25 size here are quite complete and quite

- 1 adequate. So I don't see that.
- 2 Q. You think -- you think because you
- 3 have controlled for size, that's impossible?
- 4 A. I think because I have controlled for
- 5 size, that could -- that interpretation is at
- 6 least highly unlikely. There are multiple
- 7 controls for size. That's -- let me say it
- 8 this way.
- 9 As an econometrician, if I'm concerned
- 10 about something like what you're saying, what I
- 11 would want to do is control for size. And I
- 12 have done that with multiple variables.
- JUDGE STRICKLER: Can you, staying on
- 14 page 18, can you list which ones are your
- 15 controls that you would identify as your
- 16 controls for size?
- 17 THE WITNESS: Excuse me, number of
- 18 subscribers.
- 19 JUDGE STRICKLER: Right.
- 20 THE WITNESS: Number of activated
- 21 channels. I think a count of broadcast
- 22 channels in that same category. And then I
- 23 would say the median household income because
- 24 size is gross receipts, and so that measures --
- 25 that is going to be correlated with how much is

- 1 paid.
- 2 Sort of the accounting period, the
- 3 changes over time, that's going to be more a
- 4 measure of the increase in the price over time.
- 5 But as far as cross-areas, I think it
- 6 is subscribers, channels, and broadcast
- 7 channels get at measures of the size of the
- 8 area and the system, and then household income
- 9 gets at things that are going to be correlated
- 10 with payments.
- JUDGE STRICKLER: Thank you.
- 12 BY MR. MacLEAN:
- 13 Q. You were asked some questions by Mr.
- 14 Cho about confidence intervals of your shares.
- 15 And you said you didn't calculate confidence
- 16 intervals of your shares. Is that right?
- 17 A. I didn't present any, correct.
- 18 Q. And actually it would be very, very
- 19 difficult to calculate, compute confidence
- 20 intervals with regard to shares because your
- 21 shares of any one category are dependent on the
- 22 shares in other categories. Is that right?
- 23 A. Yeah. I mean, you have to do
- 24 something more than just a simple linear
- 25 calculation.

- 1 Q. Okay. But you did say that confidence
- 2 intervals could be calculated for your
- 3 coefficients, correct?
- 4 A. Right. I think it would be
- 5 straightforward to compute confidence
- 6 intervals. You can do it almost off the page
- 7 for the coefficient. And, therefore, pretty
- 8 straightforward to do it for dollar amounts,
- 9 which would be coefficients times minutes.
- 10 O. Okay. And the way that we would
- 11 calculate confidence intervals, we take your
- 12 standard error, we would multiply that by 1.96
- and that would be your confidence interval
- 14 above and below, correct?
- 15 A. Approximately, yes.
- 16 O. Okay. So if we were to do that for --
- 17 we will start with sports programming. Okay?
- 18 If we were to calculate confidence intervals
- 19 here, we would get a confidence interval
- 20 ranging from 0.003 to 9.669.
- Does that look about right to you? I
- 22 have a calculator if you would like it.
- 23 A. There is actually one here handily,
- 24 but that looks -- I mean, I think the math is
- 25 roughly correct, yes.

- 1 O. Okay. So you can say with confidence
- that sports programming is worth somewhere
- 3 between a fraction of a penny per minute and
- 4 \$9.67 per minute?
- 5 A. I think I can say a lot more than
- 6 that. And, again, this is, just to be clear,
- 7 this is why I think it's important in my view
- 8 to think of this analysis as corroborative of
- 9 the Bortz survey.
- 10 Q. Well, let's go through -- we don't
- 11 want to just focus on one here because I know
- 12 you operate on all of them. So let's go down
- 13 to Program Suppliers.
- 14 Program Suppliers, your confidence
- interval goes from .265 to .673. Does that
- 16 look about right?
- 17 A. I mean, yes, on the math. The answer
- 18 I was giving before is important, though,
- 19 because a confidence interval acts like the
- 20 regression is the only piece of information
- 21 that I have.
- 22 Q. Well, sir, you will have a chance on
- 23 redirect, if your counsel wants to give it to
- you, to talk about what you think is important.
- 25 But I would like to focus on what I think is

- important for a moment.
- 2 If we take a look at Commercial
- 3 Television, your confidence interval there is
- 4 going to be about 3.14 to 1.706, right?
- 5 A. Again, that's the confidence interval
- from the regression. That's not my confidence
- 7 interval because my analysis is based on all
- 8 the data in the record.
- 9 Q. So based on this, you can say with
- 10 confidence that Commercial Television
- 11 programming is worth an average of between 31
- 12 cents and \$1.71?
- 13 A. I can say a lot more than that if I
- 14 combine this with the Crawford regression and
- 15 the Bortz survey.
- 16 Q. All right. So let's take a look at
- 17 Public Television. Confidence intervals from
- 18 0.060, 6 cents, to 1.260, \$1.26.
- 19 Does that confidence interval look
- 20 right?
- 21 A. That looks like the correct confidence
- interval from the regression coefficient, yes.
- Q. Canadian will be negative \$1.39, so
- 24 people are trying to get rid of their Canadian
- 25 programming, I guess, and negative about 56

- 1 cents.
- 2 Is that confidence interval about
- 3 right?
- A. I think you have done the math right,
- 5 yeah.
- 6 Q. Devotional would be negative \$1.18,
- 7 basically, to negative about 22 cents. Is that
- 8 about right?
- 9 A. Yeah, it looks like the math is right.
- 10 Q. Do you think our friends in Louisiana
- 11 would agree with that?
- 12 A. I don't know what they are agreeing
- 13 with because I don't know what substantive
- 14 conclusion you are trying to draw, given how
- 15 these are being used.
- 16 Q. And for network we have got a
- 17 confidence interval of negative \$1.55 to
- 18 negative about 42 cents, right?
- 19 A. Yeah, it looks like you have done the
- 20 math right.
- Q. And if you take a look at the range of
- these confidence intervals, you will see that
- there is a dividing line between those that are
- 24 positive and those that are negative.
- But, in fact, all of your positive

- 1 coefficients are within each others' confidence
- 2 intervals, every single one of them. Isn't
- 3 that right?
- 4 A. Maybe. You can't really do that
- 5 comparison because there is a correlation that
- 6 you would have to account for. But, yes, as
- 7 far as the math that you have done, that's
- 8 true, it doesn't have any statistical meaning.
- JUDGE FEDER: Mr. MacLean, you are
- 10 going off the screen to the right. Slide it
- 11 over a little.
- MR. MacLEAN: Oh, I'm sorry. There we
- 13 go.
- 14 BY MR. MacLEAN:
- 15 Q. Basically what you've got here is a
- 16 four-way statistical tie for the top four in
- 17 your -- in your -- in terms of top four in
- 18 value coefficients; is that right?
- 19 A. No. You can't draw that conclusion
- from the math that you have done, because there
- 21 you would have to account for the correlation
- 22 between -- I'm not trying to get too technical,
- 23 but you can't just compute the confidence
- interval on each one and compare.
- O. Because there is some correlation

- 1 between them; is that what you are saying?
- 2 A. Right. You have to -- if you wanted
- 3 to -- if you are saying you want to test the
- 4 hypothesis that two of those coefficients are
- 5 equal, you would have to do that in a way that
- 6 accounts for the correlation between the
- 7 coefficients.
- 8 Q. Don't you -- don't you have separate
- 9 coefficients so that you can account for that
- 10 correlation?
- 11 A. I mean, if you had the underlying
- 12 correlation, yes. It is not on here and I
- don't have it where I sit. And it is not
- 14 reflected by this comparison of the confidence
- 15 intervals.
- 16 But the relevant point is that the
- 17 purpose of the regression is to get the best
- 18 estimates and to compare those best estimates
- 19 to the Bortz survey. Right?
- 20 And the confidence intervals are
- 21 really only important if I have no other
- information to compare it to, so I am testing a
- 23 hypothesis based on just the regression.
- 24 All that I take from the regression is
- 25 that these coefficients and values are

- 1 corroborative of Bortz, which in my
- 2 professional opinion would be really unlikely
- 3 to have a match between two totally different
- 4 analyses, if the analyses were not valid.
- 5 Q. Well, Bortz gives a positive value to
- 6 Canadian programming, right?
- 7 A. Right, it's a low but positive value.
- 8 Q. And that's quite inconsistent with the
- 9 idea of there being a negative value to
- 10 Canadian programming, right?
- 11 A. I mean, I would agree it's positive,
- 12 not negative. It is quite consistent with the
- rankings and the things that I went through in
- 14 my direct testimony.
- 15 Q. Would you say that positive is
- 16 inconsistent with negative?
- 17 A. I mean, yes, if those two statements
- 18 -- those two words are inconsistent with each
- 19 other. I think saying that Canadian is one of
- 20 the smaller categories and the ranking is right
- 21 is what I take --
- 22 Q. Actually positive is an antonym of
- 23 negative, right?
- 24 A. That sounds right.
- 25 O. And same with Devotional. Bortz, the

- 1 Bortz surveys give Devotional a positive value;
- 2 is that right?
- 3 A. That's correct.
- 4 Q. And you would agree with me that a
- 5 positive value is inconsistent with a negative
- 6 value for Devotional programming, correct?
- 7 A. Yeah. I would agree that it's -- yes,
- 8 they're antonyms, as you said. I think it is
- 9 consistent with the ranking and the relative
- 10 size, but I would agree that the value is not
- 11 negative.
- 12 Q. And do you -- do you find it, as an
- economist, do you find it at all in accordance
- 14 with expectation that there would be a negative
- value to network programming?
- 16 A. We talked about that at length. Given
- 17 the duplicative nature, I don't find it
- 18 surprising.
- The key for me, though, is, as an
- 20 economist who does these sorts of regressions
- 21 all the time, the finding of a negative value
- for a small category is consistent with what I
- 23 see regularly.
- 24 It indicates that for the smaller
- 25 categories, it can sometimes be hard to find a

2	paying a high price for it.
3	Q. Just to close the loop on the
4	confidence intervals, as with the positive
5	confidence intervals, the confidence intervals
6	of all the negative coefficients also overlap
7	with one another, do they not?
8	A. With the same caveat about that not
9	being a statistically-meaningful comparison,
10	yes.
11	JUDGE BARNETT: Are you switching
12	gears, Mr. MacLean?
13	MR. MacLEAN: I am.
14	JUDGE BARNETT: Okay. Then let's take
15	our noon recess. We will be at recess until
16	1:10.
17	(Whereupon, at 12:11 p.m., a lunch
18	recess was taken.)
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positive value, if not that many people are

1 AFTERNOON SESSION

- 2 (1:18 p.m.)
- JUDGE BARNETT: Please be seated.
- 4 Mr. MacLean?
- 5 MR. MacLEAN: Thank you, Your Honor.
- 6 BY MR. MacLEAN:
- 7 Q. Dr. Israel, I'd like to now talk with
- 8 you about whether and to what extent your
- 9 regression corroborates or is corroborated by
- 10 Dr. Crawford's.
- 11 A. Okay.
- 12 O. So if we could take a look at -- this
- is Exhibit 2004, page 40, figure 16. It will
- 14 be up on the screen in a moment.
- 15 If we could blow up that figure. So
- 16 this is -- this is Dr. Crawford's estimation of
- 17 average marginal value of one distant minute by
- 18 Claimant category. Do you see that?
- 19 A. Yes.
- 20 Q. Okay. So -- and just to remind you,
- 21 you remember that Dr. Crawford's --
- 22 Dr. Crawford used a log-linear regression, so
- 23 he had to basically convert his logarithmic
- 24 coefficients to a value, but these were the
- 25 results of his -- following his conversion. Do

- 1 you recognize that?
- 2 A. I mean, I haven't studied this table
- 3 recently, but, yes, that looks right.
- Q. Okay. So I'm going to focus here on
- 5 the bottom, the bottom line, the 2010 to 2013
- 6 average marginal value for all four years. Do
- 7 you see that?
- 8 A. Yes.
- 9 Q. Okay. So as you've seen, I put a lot
- of time and effort into my high-speed graphics.
- 11 So -- but I'd like you to help me with the next
- 12 one.
- 13 Could you, in order, go through these
- 14 -- these marginal values, average marginal
- values from highest to lowest, tell me -- tell
- 16 me what category it is and what the -- what the
- 17 stated value is?
- 18 A. From highest --
- 19 Q. Highest to lowest.
- 20 A. So Sports is first at .896. Then
- 21 Commercial with .134. Then Canadian with .112.
- Then Program Suppliers with .064. Public with
- 23 .051. And Devotional with .030.
- O. Okay. Now let's take a look at
- 25 Exhibit 1003, that's your direct testimony,

- 1 page 18, Table V-1, which is your regression
- 2 results. And here you -- you don't need to do
- 3 a conversion because you used a linear
- 4 regression specification, but these -- these
- 5 coefficient results you've said represent your
- 6 average marginal value, correct?
- 7 A. Right. I mean, I think of them all as
- 8 relative to the other values, because it
- 9 depends what you're holding constant, but, yes,
- 10 they're my relative average values.
- 11 Q. Okay. Well, actually, I think you've
- 12 said that this is actually -- could actually be
- read as dollars and cents, 4.84 for sports
- 14 programming, if we ignore the confidence
- 15 intervals, right?
- 16 A. I mean, again, holding everything else
- 17 constant, so, yes, I agree with that holding
- 18 everything else constant, but ultimately what I
- 19 would draw from them is relative values.
- 20 Q. Okay. So say -- let's do the same
- 21 exercise, read me the coefficient and the
- 22 category of programming from highest to lowest.
- 23 A. Do you want me just to do the six
- 24 again?
- 25 O. Yes, the six -- the six categories.

- 1 A. So Sports is first with 4.836.
- 2 Commercial is second with 1.01. Public is
- 3 third with .660. Program Suppliers is fourth
- 4 with .469. Devotional is fifth with
- 5 minus .701. And Canadian is sixth with
- 6 minus .973.
- 7 Q. Okay. Can I have the ELMO, please.
- 8 So here are the results side-by-side.
- 9 Now, I see first you have -- you have -- we
- 10 have Sports and Commercial Television first and
- 11 second, in both -- in both columns, correct?
- 12 A. Yes.
- 13 Q. But in yours, you've got sports at
- 14 less than five times the marginal value of CTV.
- In Dr. Crawford's, he has it about eight times
- or close to eight times the marginal value of
- 17 CTV, correct?
- 18 A. Yes, the relative values are
- 19 different. I can't do the math, but that seems
- 20 roughly correct, 5 and something just below 8.
- 21 O. And, of course, both you and
- 22 Dr. Crawford claim to have been -- to have put
- these numbers into dollars and cents values.
- 24 So in just direct terms, your value for sports
- 25 programming is about five times what

- 1 Dr. Crawford's marginal minute -- value per
- 2 minute for sports programming is; is that
- 3 right?
- A. And, again, because other things are
- 5 held constant, I really think the relative
- 6 values are what you can look at.
- 7 Q. Well, you have -- you have Public
- 8 Television third in order, right?
- 9 A. Correct.
- 10 Q. Dr. Crawford has it fifth in order,
- 11 second to last, right?
- 12 A. That's right.
- 13 O. You have Program Suppliers fourth in
- 14 order -- you both have Program Suppliers
- 15 fourth, but you have it less than Public
- 16 Television and Dr. Crawford has it more than
- 17 Public Television, right?
- 18 A. Those two are flipped one spot, yes.
- 19 Q. You have Devotional fifth and
- 20 negative, correct?
- 21 A. Correct.
- 22 Q. Dr. Crawford has it fifth but -- I'm
- 23 sorry, last but positive. Correct?
- 24 A. Correct.
- Q. And you've agreed with me already that

- 1 negative is inconsistent with positive, right?
- 2 A. Right. The logarithmic form is going
- 3 to give you positives for all of them.
- Q. Well, that's -- I mean -- that's not
- 5 correct, but we'll -- we'll go on to the next
- 6 one.
- 7 CCG, you've got it strongly negative,
- 8 right?
- 9 A. Correct.
- 10 Q. It's supposed to be a point there.
- 11 Dr. Crawford has it strongly positive and, in
- 12 fact, third in order of relative marginal
- 13 value, correct?
- 14 A. He does have it third, yes.
- 15 Q. All right. You can take that down
- 16 now.
- 17 I want to talk a little bit about some
- 18 of the sensitivities -- you can take this down
- 19 too -- some of the sensitivity tests that were
- 20 conducted. You did discuss Dr. Gray's
- 21 sensitivity in which he eliminated all of the
- 22 minimum fee systems, right?
- 23 A. Among other changes, yes.
- Q. And you -- and you said that by
- 25 eliminating all of the minimum fee systems, he

- 1 was in essence reducing -- taking away data,
- 2 reducing the amount of data that he was using
- 3 in the -- in the regression; is that right?
- 4 A. Yes.
- 5 Q. Did you know that Dr. Crawford's test
- 6 had a dummy variable for every single system
- 7 accounting period?
- 8 A. Yes. He used a different source of
- 9 identification. He looked within systems. I
- 10 looked across systems. That's why you get some
- 11 differences in numbers and it's rather striking
- that these shares end up matching so well.
- 0. And you're aware that by using a dummy
- 14 variable for every system accounting period, he
- was essentially removing the influence of those
- 16 systems with a single subgroup?
- 17 A. As I said, his -- his methodology, I
- 18 think, by design was to look within system
- 19 across subscriber groups. So, yes --
- 20 Q. And thereby removing in essence the
- influence of all data that contained -- that
- 22 was from a system containing only one
- 23 subscriber group, correct?
- A. I mean, you can't look within those so
- 25 I would agree with that. I mean, I think it's

- 1 a substantial plus that he used a very
- 2 different source of variation than I did;
- 3 therefore, got different numbers as you showed
- 4 but got very similar shares.
- 5 Q. Well, similar shares. He gave
- 6 Devotional a positive share, right?
- 7 A. He gave it one of -- the lowest share
- 8 but a positive share.
- 9 Q. And you would have given Devotional a
- 10 negative share, had you calculated -- had you
- 11 computed negative shares, correct?
- 12 A. I mean, that's just not my
- 13 methodology, so -- and it hasn't been the
- 14 methodology when these linear regressions have
- been used in previous iterations either.
- 16 Q. And when you say Dr. Crawford and you
- 17 got similar results, what you basically mean is
- 18 top-three matching, you had the -- you had the
- 19 same three systems -- same three categories in
- 20 the top three, right?
- 21 A. I mean, on the basis that I presented
- in my direct testimony, so similar matches for
- 23 the top three and similar overall ranking.
- O. Now, Dr. Erdem also did some
- 25 sensitivity testing on your -- on your

- 1 regression, correct?
- 2 A. He -- yes, he made some changes to the
- 3 regression.
- Q. Okay. Well, one of his changes was to
- 5 test for non-linearities, correct?
- A. He added an extra set of variables to
- 7 the regression. It's not a test for
- 8 nonlinearity I've seen in 30 years of doing
- 9 this.
- 10 Q. Well, what did you do to test for
- 11 non-linearities?
- 12 A. I mean, as I indicated, my method was
- to use a linear regression, that has been used
- in the past. That's -- my methodology was to
- 15 test for the best linear predictor, consciously
- to keep it simple and to match what had been
- 17 done and accepted in prior versions of the
- 18 proceedings.
- 19 Q. So is that an answer that you did not
- 20 test for nonlinearity?
- 21 A. Right, I maintained a linear model
- 22 throughout.
- Q. How would you test for nonlinearity,
- if you were to look for -- look to see if there
- 25 was nonlinearity?

- 1 A. I mean, you could try other functional
- 2 forms. I've seen people do things like,
- instead of linear numbers, put a log number on
- 4 the right-hand side. Something like you could
- 5 add a -- you know, something like that,
- 6 something that's an actual function that's
- 7 sometimes used in economics.
- 8 What Dr. Erdem did was add logarithmic
- 9 variables on top of linear variables, something
- 10 that I've never seen and I think would probably
- 11 break most regression specifications.
- 12 Q. Well, I think he actually added
- 13 quadratic terms, didn't he?
- 14 A. No, he added logs.
- 15 Q. If you add a linear -- a log term
- 16 keeping the linear term in, that allows
- 17 curvature, doesn't it?
- 18 A. I mean, it doesn't match any
- 19 functional form that I've ever seen justified
- 20 as a matter of economics. A linear function
- 21 measures a change in levels. A log function
- 22 approximates a change in percentages.
- 23 Q. Did you conduct any tests for the --
- 24 for sensitivity to influential observations?
- 25 A. I mean, I certainly noted that there

- were influential observations and, therefore,
- 2 checked the data to make sure the data were
- 3 reliable. It's what you want to do. If you
- 4 see there are certain large observations, you
- 5 want to make sure the data don't have errors.
- 6 You certainly don't want to remove the most
- 7 important observations as Dr. Erdem did.
- 8 Q. Wouldn't sensitivity -- wouldn't it be
- 9 important to you to know if your regression was
- 10 sensitive to influential observations,
- 11 regardless of whether you make the decision to
- 12 discard those observations or not?
- 13 A. All regressions are sensitive to
- 14 influential observations. If you have a larger
- 15 data -- observations in your data, they're
- 16 going to matter. The question is, is there any
- 17 basis to think those observations are wrong?
- 18 O. Well, it's not just wrong. Couldn't
- 19 an influential observation -- couldn't
- 20 sensitivity to influential observations be
- 21 indicative of the possibility of a missing
- 22 variable?
- 23 A. Generally, it's indicative of the fact
- 24 that those observations contain a lot of
- 25 information. So in my view, if you have data

- and you're trying to measure a relationship
- 2 between fees and programming across the
- 3 systems, you have certain observations that are
- 4 informative because they are large or they have
- 5 more signals or for any reason, then you make
- 6 sure those data are correct, and if they are,
- 7 you leave them in because they're highly
- 8 informative.
- 9 And I would note that the sources
- 10 Dr. Erdem's cites agree with me on that topic.
- 11 Q. I think Dr. Erdem also agreed that --
- that it's not appropriate to simply throw out
- influential observations simply because they're
- 14 influential, right?
- 15 A. That's the test he performed on my
- 16 regression.
- 17 O. Well, he was testing sensitivity,
- 18 wasn't he?
- 19 A. Every regression that has ever been
- 20 run is going to be sensitive to the removal of
- 21 influential observations.
- Q. Have you ever -- are you familiar with
- the illustration called Anscombe's quartets?
- 24 It's used in statistics sometimes.
- 25 A. I don't recall it. No, I don't think

- 1 so.
- Q. Let me put it on the screen and see if
- 3 you recognize it. You might recognize it from
- 4 statistics 101 or something.
- 5 Have you ever seen something like this
- 6 before (indicating)?
- 7 A. I don't know if I've seen it in
- 8 exactly this form, no. I mean, I can recognize
- 9 what's being done here in terms of fitting --
- 10 it looks like it's fitting a line in various
- 11 patterns in the data.
- 12 Q. Well, the first one would be an
- 13 example of sort of a typical linear regression
- 14 line through a series of data points, right?
- 15 A. I mean, it's an example of fitting a
- line to those points, yes.
- 17 Q. The second one would show basically a
- 18 quadratic curve with an average regression line
- 19 running through it, right?
- 20 A. Right. As I said before, I would say
- 21 that's fitting the best linear predictor to
- those points, and they appear to have a curve
- 23 to them, yes.
- 24 O. Right, but when you look at the actual
- 25 data in this example data set, there's clearly

- 1 a curve, but the line is going to draw just a
- 2 linear regression through there, right?
- 3 A. I agree. It's going to fit the line
- 4 -- what linear regression does is fit the line
- 5 that best predicts the points. And I agree
- those points appear to have a curve.
- 7 Q. Okay. And then down here in the third
- 8 example, we see a very closely -- you know, a
- 9 very close straight line of points with one
- 10 outlier up here, throws off the whole
- 11 regression line in that direction. Do you see
- 12 that?
- 13 A. I mean, I don't agree with the
- 14 characterization, but I do see that there is
- one point that is different from the rest.
- 16 And, again, if I saw that point in the data, I
- 17 would check to make sure that was a valid
- 18 observation in the data.
- 19 And if so, it's informative.
- Q. Well, and there could just be
- 21 something different about that point that could
- 22 have been captured with a -- with a control
- 23 variable, right?
- 24 A. I mean, in theory, anything is
- 25 possible. But if you have a specification that

- 1 accounts for the relevant pieces and that's a
- differential observation, you certainly would
- 3 want to include it in a calculation.
- 4 O. And then in the fourth example here,
- 5 we've got a bunch much data points that are not
- 6 correlated at all with a single, basically,
- 7 influential observation that governs the entire
- 8 regression line, right?
- 9 A. I mean, yes, because in that case,
- 10 what you're trying to do in a regression is
- 11 look at the relationship of Y, the vertical
- 12 stuff, on X. So you actually only got one dot
- 13 that gives you any information in that last
- 14 regression because there's only one value that
- 15 has a different X.
- 16 O. Right. And you didn't test for any
- 17 non-linearities, right?
- 18 A. I mean, I maintained the linear,
- 19 fitting the linear relationship. That's
- 20 correct.
- Q. Your regression is sensitive to
- influential observations, and yet you didn't do
- 23 any analysis to -- about why there were
- 24 influential observations, right?
- 25 A. I don't know what you mean by no

- 1 analysis. They're influential because of their
- 2 size, because of the systems or the signals
- 3 they chose to carry. I checked to make sure
- 4 there were no errors in the data.
- 5 Throwing out influential observations
- 6 is changing the data, right? I mean, an
- 7 analogy would be if I test a drug on 1,000
- 8 people and only 2 of them die, those would be
- 9 highly influential observations. You wouldn't
- 10 want to remove them from your analysis.
- 11 They're important to the information that you
- 12 gained.
- 13 Q. I don't think anybody is disagreeing
- 14 with you there. But wouldn't you want to know
- 15 how sensitive a regression is to an influential
- 16 observation?
- 17 A. As long as the observations are
- 18 correct, I would want to learn from that
- 19 information.
- 20 Q. Well -- now, you also conducted
- 21 sensitivity in which you, as you put it, threw
- in additional variables, right?
- 23 A. Threw in? I think one of my
- 24 sensitivities looks at controls for DMA. One
- of them adds another control for the 3.75

- 1 systems. And one of them just looks at sports
- 2 versus other categories.
- 3 O. So what makes your sensitivity so much
- 4 better than Dr. Erdem's?
- 5 A. I mean, they're not adding variables
- 6 for no apparent reason or dropping data that
- 7 provides information.
- 8 Q. So what were your reasons for adding
- 9 the variables you added?
- 10 A. DMA, you might be concerned -- I mean,
- 11 you have raised questions about whether there
- 12 are geographic differences that are largely
- 13 driving things. So it -- you know, that would
- 14 use another form of identification that just
- 15 looks within the DMA. So I was interested to
- 16 see if that would be -- would give a different
- 17 sort of answer.
- The 3.75, I mean, obviously, that's
- 19 part of the formula. So you want to make sure
- 20 that you're accounting for the formula. And
- 21 Sports versus other is obviously just a -- you
- 22 know, a direct test on the relative value of
- 23 Sports. So each of them is testing for
- 24 something specific and economic, as opposed to
- 25 just dropping observations or throwing in

- variables that don't have any particular
- 2 economic meaning.
- 3 Q. And I believe you testified in your --
- 4 in your written report that your conclusions
- 5 are not affected by these reasonable changes in
- 6 model specifications?
- 7 A. That sounds right.
- 8 Q. And here at Table C-I-3, that's
- 9 C-Roman numeral I-3, are the results of your
- 10 sensitivity regressions, correct?
- 11 A. Yes.
- 12 Q. And in model 3 here -- and just as a
- 13 reminder, model 1 is your principal
- 14 methodology, correct?
- 15 A. Yes.
- 16 Q. And then model 3 is your model in
- 17 which you include an indicator variable by DMA,
- 18 correct?
- 19 A. Yes.
- Q. Model 3 is, in fact, your only
- 21 regression that specifically controls for
- 22 geography; is that right?
- 23 A. I mean, it has -- it's the only one
- 24 that controls DMA by DMA. Other ones have
- 25 variables that differ by geography.

- 1 Q. But none that control specifically by
- 2 geography; is that right?
- 3 A. I mean, again, none that -- no other
- 4 ones that control for the specific geographic
- 5 location, correct.
- 6 Q. So if we take a look at your
- 7 regression results here, you still have
- 8 positive result for Program Suppliers, right,
- 9 positive and statistically significant, right?
- 10 A. Yes.
- 11 Q. And you still have positive and
- 12 statistically significant result for public
- 13 broadcasting, right?
- 14 A. Yes.
- 15 Q. Still have a negative coefficient for
- 16 Devotional programming?
- 17 A. Yes.
- 18 Q. Still have a negative coefficient for
- 19 Canadian programming?
- 20 A. Yes.
- Q. But if we compare across, comparing
- what you've got for model 3 and your original
- 23 model, you'll see that your Program Suppliers
- 24 coefficient is now about 50 percent higher. Do
- 25 you see that?

- 1 A. Yes.
- Q. Do you think Program Suppliers would
- agree that your conclusions aren't affected by
- 4 this reasonable change in the model
- 5 specification?
- A. I mean, again, the question I'm asking
- 7 ultimately is do the rankings and the shares
- 8 generally support Bortz? I'm sure they would
- 9 say that was higher, but I don't take that as
- 10 changing the overall rankings or the
- 11 corroboration.
- 12 Q. Public Television also, about
- 13 50 percent higher in your -- in your model than
- in your model 1, correct?
- 15 A. Yes.
- 16 O. You think Public Television would
- 17 agree that your conclusions were not affected
- 18 by this reasonable change?
- 19 A. Certainly, the quantitative
- 20 conclusions of the regression are different. I
- 21 don't think it changes the overall
- 22 corroboration.
- Q. Well, you say quantitative change. I
- 24 mean, we're talking numbers here. It's all
- 25 quantitative, right?

- 1 A. Well, I'm also looking at relative
- 2 ranks and things, but, yes, I agree that column
- 3 is somewhat different. I mean, as you said,
- 4 column 3 includes a large number of dummy
- 5 variables. We talked earlier about how I'm not
- 6 surprised that there's some statistical
- 7 insignificance in that. But what -- you know,
- 8 what I take from it is even with that large
- 9 number of dummy variables, the relative ranks
- 10 are different, but not, you know, reversed or
- 11 dramatically different.
- 12 Q. Well, you say -- you say relatively
- 13 large number of dummy variables or -- large
- 14 number of dummy variables. Let's be precise.
- You've got 210 dummy variables, right?
- 16 A. That sounds right.
- 17 Q. 210 DMAs, so you've got 210 dummy
- 18 variables?
- 19 A. I don't remember the count, but that
- 20 sounds right.
- Q. Okay. A lot less than 7300 dummy
- 22 variables, would you agree?
- 23 A. Yes, although if you're referring to
- 24 Dr. Crawford's regression, he uses subscriber
- 25 group level data so he has a lot more

- 1 observations than I do.
- Q. Sure. Well, how many observations did
- 3 you have?
- 4 A. I don't remember as I sit here.
- 5 Q. Okay, let's --
- 6 A. Six accounting periods times the
- 7 number of systems.
- 8 Q. Okay. Let's take a look at your
- 9 summary, your summary data, and we can -- we
- 10 don't need to guess.
- 11 Summary statistics, page A-6 of
- 12 Exhibit 1003. Let's just go to page B-1, which
- is the -- which is the regression results.
- Oh, actually, never mind, leave it on
- 15 the ELMO. I've got it right here. What am I
- 16 doing. Observations, 5,465. Right?
- 17 A. Correct.
- 18 Q. Okay. I'm sorry. I should have gone
- 19 right to that. Okay. So you've got about
- 20 5,465 observations. And how many variables do
- 21 you have with the inclusion of -- of DMA fixed
- 22 effects?
- 23 A. I mean, there's going to be 210 DMAs,
- 24 plus 6 accounting periods, plus -- there's
- 25 probably 230 some.

- 1 Q. 230 some, okay. So way more -- you've
- 2 got way more than ten observations per -- per
- 3 variable in your regression, right, even in
- 4 your fixed effects regression?
- 5 A. That's true, although it's going to
- 6 vary, it's going to matter a lot how many
- 7 different systems you have in a given DMA,
- 8 which DMAs that you're able to use and not use.
- 9 But, yes, and as far as total counts, I agree.
- 10 Q. And are you familiar with the one in
- 11 ten rule in statistical analysis?
- 12 A. I don't believe there's any such rule.
- 13 Some people have rough quide rules of thumb
- 14 about how many observations per variable, but I
- don't think those are ever given any credit.
- 16 Q. Okay. But you've got plenty of
- 17 observations per variable when you're using 210
- 18 dummy variables for -- by DMA, right?
- 19 A. There's no problem with the overall
- 20 number of observations relative to variables.
- 21 The DMA fixed effects might change which
- 22 specific DMAs are driving the results, but
- there's no problem with the overall -- what's
- 24 called degrees of freedom. There's plenty of
- 25 data.

- 1 Q. Okay. So, I mean, you agree here that
- your results when you control for DMA, they're
- 3 actually quite a bit better for Program
- 4 Suppliers and Public Television, right?
- 5 A. I mean, they certainly change for
- 6 those two numbers, yes.
- 7 Q. And, I mean, let's be -- let's be
- 8 honest here. We've -- and, you know, who are
- 9 we if we can't say nice things about our
- 10 opponents. Public Television, look, they've
- 11 actually got -- we make fun of them sometimes,
- but they've some good stuff, right? I mean,
- can you imagine subscribers might value Public
- 14 Television programming?
- 15 A. I certainly think subscribers value
- it, yes, and I do enjoy the programs.
- 17 O. Absolutely. And similar to
- 18 Devotional, this is one of the program
- 19 categories that subscribers value so much that
- they are willing to donate their own money just
- 21 to keep it on the air, right?
- 22 A. Again, this is beyond much of what
- 23 I've studied but, yeah, I agree there are
- 24 people who value it very much.
- 25 Q. All right. Program Suppliers, I mean,

- 1 we -- we use general interest as sort of a
- disparaging term, but, I mean, there's a reason
- this is a general interest programming, right?
- 4 Yeah.
- 5 A. I mean, certainly, all of this
- 6 programming has value. The question is how
- 7 much value to specific cable systems, which is
- 8 what we're here to study.
- 9 Q. Now, you've got this strongly negative
- 10 result for Canadian, but think about this,
- 11 okay? Can you imagine living in a foreign
- 12 country or a country foreign to where your
- family is, how much you would value programming
- 14 from -- from your country of origin?
- 15 A. I mean, not particularly because I
- haven't done it, but, yes. Again, I agree that
- the programming certainly has value.
- 18 Q. But now let's take a look at what your
- 19 control for geography does to Sports and
- 20 Commercial Television. Sports becomes
- 21 statistically insignificant; isn't that right?
- 22 A. I mean, the standard error goes up
- 23 slightly because of the addition of the
- 24 additional fixed effect, so, yes.
- 25 Q. The standard error goes up slightly;

- 1 is that what you said?
- 2 A. From 2.46 to 3.16.
- Q. Well, if you would like to, we can do
- 4 the -- we can do the confidence interval on
- 5 that.
- 6 A. I mean, you can do it. Confidence
- 7 intervals on sensitivities -- I mean, now we're
- 8 even one level deeper. The point of a
- 9 sensitivity is generally to see if there is
- 10 a -- how sensitive is coefficient is.
- 11 Q. So the confidence interval here on --
- 12 for sports programming is going to be between
- negative 6.75 up to positive 9.651. Does that
- 14 look about right?
- 15 A. Again, you've done the math right,
- 16 but --
- 17 Q. Thank you.
- 18 A. -- the concept of a confidence
- interval is as though that's the only piece of
- 20 information you have.
- 21 Q. Well --
- 22 A. It's almost exactly the same number as
- 23 4.8. That's what you take from the --
- O. What you're really saying here is with
- 25 confidence you can say that sports is somewhere

- in the range of the least valuable to the most
- valuable category of programming when you
- 3 control for geography?
- A. Non-remotely, right, because there's
- 5 four different regressions here with four
- 6 different sets of variables, all of which have
- 7 sports ranked first.
- 8 Q. Well, which --
- 9 A. The odds of that happening by chance
- 10 are preponderously low.
- 11 Q. Which of these regressions has the
- 12 highest R-squared -- has the best R-squared?
- 13 A. I mean, you add a bunch of DMA fixed
- 14 effects, you're going to get a higher
- 15 R-squared. The notion of choosing a regression
- 16 to maximize R-squared is given zero credit in
- 17 economics.
- 18 Q. It means -- you chose this model as a
- 19 reasonable model, right?
- 20 A. I chose it as a sensitivity check to
- 21 add DMA controls.
- Q. And you chose it because there is a
- 23 reasonable econometric reason to do it, right?
- 24 A. I think -- I thought it was reasonable
- 25 to add those controls and look to see what the

- overall pattern was, yeah.
- O. Well, look what happens to CTV
- 3 programming. They go from strongly positive
- 4 and statistically significant to negative and
- 5 statistically insignificant?
- 6 A. Right.
- 7 Q. Do you think CTV would agree that your
- 8 -- your conclusions don't change based on the
- 9 -- your sensitivity here?
- 10 A. I think they would probably think that
- one changes a lot, and say when it's the most
- 12 localized of programming, you probably
- 13 shouldn't control for every single DMA.
- Q. What are the only two categories here
- of programming that have a positive and
- 16 statistically significant coefficient when you
- 17 control for geography?
- 18 A. Under that regression, it's Program
- 19 Suppliers and Public Television.
- 20 Q. Program Suppliers and Public
- 21 Television are the only program categories that
- have a positive and statistically significant
- 23 coefficient under this control for DMA; is that
- 24 right?
- 25 A. Right. Again, I think what's most

- 1 important is the extent to which coefficients
- 2 match across columns.
- Q. Okay.
- 4 A. And so I don't think it's valid to do
- 5 a hypothesis test or a confidence interval on
- one regression when you're looking at four.
- 7 It's just not the way to use the tool. But,
- 8 yes, that's -- in that column, that is what it
- 9 says.
- 10 Q. Can we take a look at Exhibit 6036,
- which is Dr. Gray's direct testimony, page 19.
- 12 Okay. So I'm putting up in front of you --
- 13 this is -- these were the shares from
- Dr. Gray's, MPAA's witness, Dr. Gray's shares.
- 15 A. I see that.
- 16 Q. And if you go through every year,
- 17 2010, '11, '12, '13, and who are the two top
- 18 shares in each of those years?
- 19 A. It looks like Program Suppliers and
- 20 Public.
- Q. Every year, right?
- 22 A. It looks like it, yes.
- Q. And so on the top two comparison
- 24 methodology, one interpretation of your control
- 25 for DMA is that you've just corroborated

- 1 Dr. Gray's results, haven't you?
- 2 A. Not remotely. Even if you want to
- 3 talk about significance of a single column, you
- 4 don't compare significance to get important to
- 5 compare coefficients. Significance -- or
- 6 confidence intervals tell you something about
- 7 the precision of those coefficients, but you
- 8 can't step from a statement about statistical
- 9 significance to a statement about magnitude of
- 10 value.
- 11 Q. Well, other than JSC, whether you talk
- 12 about the -- the absolute value of that
- 13 coefficient or whether you pay attention to the
- 14 fact that it's actually showing no
- 15 corroboration, you're matching two of the top
- 16 three categories, aren't you?
- 17 A. I think I lost something in your
- 18 question. Not at all based on the statistical
- 19 significance measure. You could look at the
- 20 coefficients, and then I would encourage you to
- 21 look at the overall body of results that I
- 22 presented and the shares that I presented.
- 23 Q. Certainly, one interpretation of your
- 24 DMA control test is that you're actually
- 25 matching the top two of Dr. Gray's shares based

- on his analysis, correct?
- 2 A. Again, no. You can't -- you can
- 3 question the significance of the sports
- 4 coefficient, but you can't compare shares,
- 5 which are a measure of value times minutes, to
- a question of which coefficients are or are not
- 7 significant. Shares are about the size of the
- 8 coefficient.
- 9 Q. And, of course, you are aware that
- 10 Dr. Gray, when he calculated these shares, was
- 11 missing a large body of his data, correct?
- 12 A. I believe other people have commented
- on that, yes.
- Q. Let's go back to the ELMO here. So in
- 15 spite of your results, when you control for
- 16 DMA, I take it you would still say that Bortz
- is the best methodology?
- 18 A. I think it's the appropriate
- methodology to use in the case, yes.
- 20 Q. Is Bortz a better methodology than
- 21 your regression methodology?
- 22 A. I mean, they answer different
- 23 questions, as I've said. I think -- as I
- 24 mentioned earlier, I think because the
- 25 regression, you know, has to learn what it can

- 1 learn from kind of discrete and a limited --
- you know, a discrete set of choices that these
- 3 systems make, I think Bortz gives you a more
- 4 refined measure because it asks people directly
- 5 for their valuations.
- 6 So I think Bortz directly measures the
- 7 valuations, and the purpose of a regression is
- 8 to make sure those valuations are consistent
- 9 with what's in the marketplace.
- 10 Q. Okay. Would you say that Bortz is a
- 11 better methodology than these regressions even
- though, for example, the last warm-up question
- in the -- in the -- in the Bortz survey was
- 14 about cost instead of value?
- 15 A. I mean, yes. Again, given that the
- 16 ultimate question is the relevant question and
- its corroborated by the evidence in the
- 18 marketplace.
- 19 Q. Would you say that Bortz is better
- than the regression methodologies, even though
- in the WGNA program list, it lists the Chicago
- 22 Cubs, the Chicago White Sox, and the Chicago
- 23 Bulls in the WGNA program listings?
- 24 A. Now I think I've lost your thread. I
- 25 mean, ultimately, those sorts of surveys issues

- 1 I haven't delved into. The way I have
- 2 addressed whether those sorts of things matter
- 3 or not is to see whether it matches the
- 4 regression methodologies that I've used and
- 5 that have been used in this proceeding in the
- 6 past.
- 7 Q. Do you think that Bortz is better than
- 8 the regression methodologies even though after
- 9 they made these changes, the Sports share went
- 10 up several points and the Devotional share went
- 11 down several points?
- 12 A. I mean, again, I think Bortz is asking
- 13 the relevant question. And what I can bring to
- 14 the table is that when you use the basic
- 15 regressions that are -- that I use and that
- 16 have been used in the past, it's corroborated
- 17 with the market data. That's really what I can
- 18 add to the discussion of how valid the survey
- 19 is.
- 20 Q. Do you think the Bortz survey is a
- 21 better methodology even though it leaves this
- 22 WGNA non-compensability issue just enough
- 23 unaddressed so that they can argue with a
- 24 straight face that the Devotional shares should
- 25 be reduced further?

1 MR. LAANE: I object to the question,

- 2 Your Honor.
- JUDGE BARNETT: Sustained.
- 4 BY MR. MacLEAN:
- 5 Q. In spite of these issues with the
- 6 Bortz surveys, could you explain to the Judges
- 7 why they should use the Bortz survey instead of
- 8 a regression in which the sports share is
- 9 statistically insignificant?
- 10 A. First of all, the sports share is
- 11 significant in my main regression and highly
- 12 corroborated in value across all my
- 13 regressions.
- But, second of all, as I've explained,
- 15 the Bortz survey asks the direct relative
- 16 valuation question. It gets -- it's asking the
- 17 question that I believe this proceeding needs
- 18 to answer. And it's corroborated in its
- 19 rankings and its top three valuations by two
- 20 separate regression analyses.
- MR. MacLEAN: Thank you, nothing
- 22 further.
- MR. COSENTINO: Your Honor?
- JUDGE BARNETT: Mr. Cosentino.
- MR. COSENTINO: Thank you.

1 CROSS-EXAMINATION

- 2 BY MR. COSENTINO:
- 3 Q. Good afternoon, Doctor.
- 4 A. Good afternoon.
- 5 MR. COSENTINO: I'm sorry, Your Honor.
- 6 Are you ready for me to proceed?
- 7 BY MR. COSENTINO:
- 8 Q. So we generally have been referring to
- 9 your work as a regression, right? But that's
- 10 -- we refer to the Israel regression, the
- 11 Crawford regression, the George regression,
- 12 Waldfogel regression, but it's more than that,
- 13 correct? Regression is just a tool within the
- 14 whole analysis?
- 15 A. That's fair.
- 16 Q. Okay. And just trying to get my
- 17 technology up. All right. We're going to do
- 18 this without it.
- 19 A. I'll resist any joke about it being a
- 20 distant signal.
- 21 · (Laughter.)
- JUDGE FEDER: You didn't resist very
- 23 hard.
- 24 (Laughter.)
- 25 THE WITNESS: Fair point.

- 1 BY MR. COSENTINO:
- 2 O. So -- all right. So, okay.
- In fact, the process that you use
- 4 is -- and help me understand this -- you
- 5 probably research the task, you build a model,
- 6 you collect your data, you run your regression,
- 7 and then you do your valuation? Is that the
- 8 kind of process?
- 9 A. You mean what I did in this specific
- 10 case or what I would do?
- 11 Q. Sure, in this particular case.
- 12 A. I mean, this case is somewhat unique.
- 13 That's why I asked because there was a
- 14 preexisting record of regressions in the -- in
- 15 the previous proceedings. So in this case, I
- 16 researched it, as you said, first, but that was
- 17 heavily guided by sticking quite closely with a
- 18 small number of changes to previous regressions
- 19 so that I was using a tool that had previously
- 20 been useful and obviously wasn't creating
- 21 something to achieve some specific purpose.
- 22 Q. Okay. So --
- 23 A. But other than that I would agree, I
- 24 researched it, including the previous
- 25 proceedings, and then went on to collect the

- 1 data, run the regression, and evaluate the
- 2 regression.
- Q. All right. So in the research, you
- 4 looked at Waldfogel's regression analysis?
- 5 A. Yes.
- 6 O. Okay. And his testimony?
- 7 A. Yes. It has been a little while since
- 8 I read his testimony, but definitely I did.
- 9 Q. But this was back when you were coming
- 10 up with your idea of how you were going to
- 11 approach this?
- 12 A. Right. I mean, I was very consciously
- 13 attempting to link back to what he and
- 14 Dr. Rosston had done.
- 15 Q. Okay. And you read Dr. Rosston's
- 16 written testimony?
- 17 A. Yes. Again, those have both been a
- 18 while so my recollection will be fuzzy, but,
- 19 yes, I did.
- 20 Q. Okay. Did you read the decisions of
- 21 the CARP and the CRB with respect to those
- 22 regressions?
- 23 A. Yes, I believe so. I believe I read
- 24 all of them, but, again, that was all very
- 25 early.

- 1 Q. Okay. Do you recall what else you
- 2 read at that time?
- 3 A. I really don't remember a full list of
- 4 what I read. I know I read Waldfogel and
- 5 Rosston and the decisions. Nothing else is
- 6 coming to mind.
- 7 Q. Okay. Did you read any of the old
- 8 Bortz reports?
- 9 A. I don't think I read the Bortz -- the
- 10 previous Bortz reports, but that might be
- 11 wrong. It's possible early on I reviewed -- I
- 12 certainly had reviewed some of the shares and
- the results, but I don't remember if I read an
- 14 entire Bortz report from before.
- 15 O. Okay. And then you developed your
- 16 model at that point to emulate, was it
- 17 Waldfogel's model?
- 18 A. Yes, that's fair.
- 19 Q. Okay. Is it -- and the differences
- 20 between your model and Waldfogel's model, can
- 21 you summarize those?
- 22 A. Sure. There's just a few. And
- they're pretty minor differences. One of them
- 24 was really not a difference in the model, just
- 25 a difference in how the minutes were counted

- 1 because since the last proceeding, there has
- 2 been this -- I think a change in the law and
- 3 therefore an increased use of subscriber
- 4 groups, as I understand where the system only
- 5 has to pay for the subscribers actually
- 6 receiving the content.
- 7 I used a prorated minutes measure that
- 8 accounted for what percentage of the
- 9 subscribers received the distant signal. I
- 10 also -- again, not really a change to the model
- 11 but just to the data -- used 28 days of
- 12 programming guides to get the minutes mix as
- 13 opposed to 21.
- 14 And then one more -- I added a control
- variable, basically, for the network minutes.
- 16 I think he had had just a low-power bucket but
- 17 not anything else as separate from the
- 18 categories. But I also added a network
- 19 control. Those are the ones I remember.
- 20 Q. Okay. And I wanted to ask you about
- 21 within the model, the purpose of the -- the
- 22 purpose of the regression approach, right, I
- think you said you want to learn from choices.
- 24 Do you recall?
- 25 A. Yes.

- 1 O. Okay. And what are the choices we
- 2 want to learn from?
- 3 A. What -- I would say what signals and
- 4 then ultimately what types of content systems
- 5 make, what they choose to carry.
- 6 Q. Okay. So what cable system operators
- 7 decide to carry, those are the choices that are
- 8 relevant?
- 9 A. Correct.
- 10 Q. Okay. And the model should reflect
- 11 the environment in which those choices are
- 12 made?
- 13 A. I'm not sure I understand the
- 14 question. I mean, generally, it should be
- 15 built to reflect the factors that affect the
- 16 price on the choices.
- 17 O. Okay. But it should reflect what
- 18 choices are available; would you say that?
- 19 A. I mean, I think it should reflect the
- 20 choices that are made. I think the choices
- that are made indicate the value that people
- 22 put on the content. So I'm not sure what to
- 23 say beyond that.
- Q. Okay. Now, we mentioned -- you
- 25 mentioned earlier on direct that you understood

- 1 that the Canadian signals could not be carried
- 2 throughout the country. Is that correct?
- 3 A. Yeah. My general understanding is
- 4 there is a Canadian zone in which those signals
- 5 are -- I guess I'm not sure of the exact lines
- 6 of the law, I'm not a lawyer, but I think
- 7 they're at least generally and perhaps
- 8 completely available within a Canadian zone.
- 9 Q. Okay. And not available outside the
- 10 Canadian zone?
- 11 A. My recollection, I think, is they
- can't be carried under the compulsory license
- outside the Canadian zone, but, again, I'm not
- 14 a lawyer. So I may have the details of the law
- wrong, but that's my general understanding.
- 16 Q. No, and I think that's right.
- 17 So a decision by Canadian -- by a
- 18 cable system within the Canadian zone to carry
- 19 a Canadian signal is one of these choices that
- you're trying to document, right, and learn
- 21 from?
- 22 A. I would say yes, but also the
- 23 decisions made by all the systems.
- Q. Okay. And so there are many cable
- 25 systems within Canadian zone. Not all of them

- 1 carry Canadian signals. And that tells us
- 2 something about how they value Canadian
- 3 signals, correct?
- 4 A. I agree, those choices tell us
- 5 something, yes.
- 6 Q. Okay. Now, for systems that are
- 7 outside the Canadian zone, do the cable systems
- 8 have a choice to carry a Canadian signal?
- 9 A. No. I mean, in the way I interpret
- 10 the model, that would mean that's one of the
- 11 many reasons why they don't put value on that
- 12 content because it's not something they're
- 13 legally allowed to carry.
- 14 Q. Well, is that a lack of value or lack
- 15 of choice?
- 16 A. I'm not sure as an economist I draw a
- 17 distinction. I think what I want to understand
- 18 is what content people pay for for any of the
- 19 various reasons they choose to carry it, right?
- 20 So it might be they don't carry stuff outside
- 21 the Canadian zone because they can't. It might
- 22 be because some people in more distant markets
- 23 don't carry a signal because it's too far
- 24 distant.
- I think ultimately -- that's why I

- 1 said what I said earlier; ultimately, I think
- what's relevant economically is what they
- 3 choose to carry, and one of the reasons they
- 4 might make that choice or not make that choice
- 5 might be regulatory restrictions.
- 6 Q. But if there's a regulatory
- 7 restriction, it's not a choice, is it?
- 8 A. I mean, again, maybe that's a legal
- 9 distinction. As an economist, the way I think
- 10 about it is people carry what has value for
- 11 them and there's various reasons why they may
- or may not carry -- I generally don't try to
- 13 control for every reason why they do or don't.
- 14 I just try to see what people do and,
- therefore, on average, which different systems
- 16 have value for different content.
- 17 O. You --
- 18 A. I take your point legally. As an
- 19 economist, there are so many different reasons
- 20 why systems might make that choice, that I'm
- 21 not trying to distinguish each reason. I'm
- just trying to understand what they carry and
- 23 what they pay for what they carry. And if one
- of the reasons is a legal reason, that's one of
- 25 the reasons.

- 1 Q. All right. There was an example that
- 2 was used earlier last week by an economist of a
- 3 signal in Windsor and a signal in Detroit.
- 4 A. Okay.
- 5 Q. And both are carried, for example,
- 6 within the Canadian zone by cable systems.
- 7 A. Okay.
- 8 O. And none are carried outside the
- 9 Canadian zone.
- 10 A. Okay.
- 11 Q. Now, do we know more about the cable
- 12 system operators' interest in the Detroit
- 13 signal which can be carried outside the
- 14 Canadian zone but is not, than we know about
- the Windsor signal, which can't be carried
- 16 outside?
- 17 A. I mean, we have one more reason that
- 18 might apply to the Windsor signal. It might be
- 19 that a system doesn't want to carry either or
- 20 has reasons why they do or don't want to carry
- 21 Detroit. But I would say in each case we know
- 22 that systems that choose not to carry it aren't
- 23 paying for it.
- 24 And I would agree that in the case of
- Windsor, we have one more potential explanation

- 1 for that.
- 2 Q. Okay. But you haven't modeled
- 3 anything that would take that into account in
- 4 your model?
- 5 A. I mean, I don't think I agree with
- 6 that. I think what I've modeled in all these
- 7 cases is the decisions that are made and,
- 8 therefore, the average valuation.
- 9 So if the average valuation in the
- 10 case of Canadian signals is a mixture of the
- 11 Canadian zone that can carry it and has value
- 12 and, I agree with you, a number of non-Canadian
- zones that can't carry it and, therefore, place
- 14 zero value on it, I think what I'm computing is
- 15 that overall average.
- I don't think that's substantively
- 17 different, by the way, from -- you know, just a
- 18 different regression methodology, but it's not
- 19 substantively different from modeling the
- 20 Canadian zone and modeling the rest of the
- 21 country, getting zero for one and a positive
- 22 number for the other and averaging the two.
- I mean, I think that's what Dr. George
- 24 has done. And I don't think those are
- 25 answering different questions. I just think --

- 1 I think there's other differences in my
- 2 methodology and Dr. George that explain why we
- 3 get different answers.
- Q. All right. Well, let's move on then
- 5 to that. One of the next steps in this process
- is gathering your data, right? Now that you've
- 7 got a model, you need to load up your data.
- In your report, you talk about getting
- 9 your data on program classifications from TMS
- 10 Gracenote, correct?
- 11 A. Well, I got the list of programming
- 12 from TMS Gracenote. So that -- that's like a
- 13 channel quide you would see on your TV. And
- 14 then from that, working with Mr. Trautman and
- 15 Mr. Klein and my team working with him, we used
- 16 those program listings to -- we classified the
- 17 programs that were listed and, therefore, got
- 18 the mix of programming on each signal.
- 19 O. All right. Now, after the direct
- 20 cases in this proceeding were filed, several
- 21 parties amended or corrected their
- 22 categorization. Dr. Crawford corrected his,
- Dr. George adjusted hers, and eventually, I
- 24 believe, Dr. Erdem modified his list of
- 25 programs that appeared on Canadian signals.

- 1 Did you review that?
- 2 A. I mean, I recall that Dr. George had a
- different list or some differences from mine in
- 4 the Canadian signals. As far as the timing of
- 5 when people modified their classifications, I
- 6 mean, I don't remember. We -- we took care to
- 7 classify using the TMS data up front, and I
- 8 stuck with those classifications.
- 9 Q. Okay. Did you ever review any of the
- 10 data from the Canadian Radio, Television, and
- 11 Telecommunications Commission?
- 12 A. I personally did not. I don't know if
- 13 the team did or not. I do know that my
- 14 analysis used our TMS-based classifications
- 15 throughout.
- 16 Q. Okay. Eventually, Dr. George filed a
- 17 rebuttal which indicated that about half a
- 18 million minutes of programming -- I think that
- 19 was her top 50, amounted to over half a million
- 20 minutes of programming, were misclassified in
- 21 your regression model.
- 22 A. Right.
- 23 Q. Did you correct your regression model
- 24 after that?
- 25 A. We talked about it on direct. What I

- 1 did was use those classifications as a test to
- 2 see if they changed my results. And they --
- 3 basically none of the estimated coefficients or
- 4 shares moved by more than a percentage point or
- 5 so.
- 6 So I did not change my original
- 7 classifications, but I checked to see if that
- 8 made a material difference.
- 9 O. Okay. But you didn't -- I mean,
- 10 that's not available anywhere for anyone to
- 11 look at, right?
- 12 A. I mean, it only came from Dr. George
- in her rebuttal. So I tested once she put that
- in her rebuttal testimony.
- 15 O. Okay. After you've assembled your
- 16 data, then you run your regression and that
- 17 gives you a -- basically this coefficient of
- interest, which is essentially a price, right?
- 19 A. I think of it as a value, really,
- 20 because it's being driven by the demand side
- 21 choices. So I think it's indicating the amount
- that people pay given the regulated pay
- 23 structure and, therefore, the value they must
- 24 put on the content, if they're willing to pay
- 25 that much and still carry it.

- 1 Q. It's a value per minute?
- 2 A. Given that I measure things in
- 3 minutes, it's really the value per these pro
- 4 rated minutes, but, yeah, I think it's fair to
- 5 call it a value per minute.
- 6 Q. Okay. And then you multiply it by
- 7 compensable minutes to determine your shares,
- 8 correct?
- 9 A. Right. And as I mentioned earlier,
- 10 you're controlling for a bunch of other stuff.
- 11 So I think the right way to think of them is
- 12 relative values per minute. And I think the
- thing you can best do with them is use them to
- 14 figure out relative values and, therefore,
- 15 relative shares.
- 16 Q. Okay. But by themselves, these
- 17 coefficients don't -- I mean, you're not
- 18 suggesting we compare the coefficients and
- 19 determine relative value based on those, right?
- 20 A. Only relative value per minute. You
- then have to multiply by the number of minutes
- 22 to get the share.
- 23 Q. Right.
- A. So you have the multiply the value
- 25 times the units, basically, the value per unit

- 1 times the units.
- Q. Right. Because the units -- you know,
- 3 the typical valuation process is how many of
- 4 something do you have and what are they worth
- 5 each?
- 6 A. Precisely.
- 7 Q. All right. Now, your results come out
- 8 with a negative coefficient for Canadians, for
- 9 Canadian Claimant content. Dr. Waldfogel's
- 10 results came out with a 3.3 percent share for
- 11 Canadian Claimants.
- 12 Do you recall that?
- 13 A. I didn't recall the exact number
- 14 but --
- 15 Q. Okay. Well, I'd show it to you. But
- 16 I think it's actually in your testimony.
- 17 A. Yeah, I mean, it sounds right. I just
- 18 didn't want -- I didn't recall the exact
- 19 number.
- 20 Q. Okay. Can you turn on the ELMO.
- 21 A. There it is.
- 22 Q. There we go. See it, 3.3?
- 23 A. Yes.
- 0. Okay. Now -- and there was another
- table that you had which showed Dr. Ducey's

- 1 compensable minutes versus Dr. Crawford's
- 2 compensable minutes. Do you recall that?
- 3 A. Yes.
- Q. And there was a move from 4.5 percent
- for the Canadians to 6.6. Do you recall that?
- A. I don't recall the specific numbers,
- 7 but I -- that sounds like it could be right. I
- 8 certainly don't question you.
- 9 Q. So this is from your rebuttal
- 10 testimony.
- 11 A. Yes.
- MR. COSENTINO: And, Your Honor,
- though it says restricted at the top, I believe
- 14 this page is not.
- 15 MR. LAANE: That's correct.
- JUDGE BARNETT: Thank you.
- 17 THE WITNESS: Yep, I agree. I see the
- 18 numbers.
- 19 BY MR. COSENTINO:
- 20 O. Okay. So in terms of the total amount
- of compensable programming for the Canadian
- 22 Claimant groups, it has gone up by about
- 23 50 percent, correct?
- 24 A. That sounds right.
- Q. And, in fact, we have more compensable

- 1 minutes than sports?
- 2 A. I mean, just in terms of this volume
- 3 of minutes measure.
- 4 Q. Right.
- 5 A. They were about the same before and
- 6 now it's half a percentage point higher.
- 7 Q. So even though we have gone up by
- 8 50 percent, your regression compared to
- 9 Dr. Waldfogel's regression knocks us down to
- 10 zero?
- 11 A. I mean, the regression, as you've said
- itself, finds a negative value per minute,
- 13 which I make zero. And then it leaves -- it
- 14 leaves a zero. As I've indicated, I think
- there's value and I think the Bortz survey is
- the way to get at it, but I agree that because
- 17 the regression itself, similar to what
- 18 Dr. Rosston found the first time, by the way,
- 19 and does not find a positive value per minute,
- 20 the regression itself returns a zero.
- 21 Sort of 4.5 versus 6.6 ends up not
- 22 affecting it because it has got a zero value.
- Q. Okay. Now, you have -- you have, as
- 24 you just did, touted the Bortz survey numerous
- 25 times as being a better tool than your

- 1 regression. Is that fair?
- 2 A. I mean, I think it's a better tool for
- 3 purposes of assigning the ultimate valuation
- 4 because I think it goes right to that question
- 5 in a more continuous, precise way than the
- 6 regressions can do.
- 7 Q. But during the course of your
- 8 testimony today when you have volunteered that
- 9 you're not a survey expert -- is that correct?
- 10 A. That's fair. What I can bring to the
- 11 table is understanding what question the survey
- 12 asks and that, as an economist, it's the
- 13 relevant question, and then confirming that the
- 14 results are consistent enough with marketplace
- data, corroborated by marketplace data that I
- 16 would feel comfortable using them.
- 17 Q. All right. When we went -- when we
- 18 talked about these steps, research and the
- 19 model, collecting the data, running the
- 20 regression, determining relative value, do you
- 21 have a sense of how much time you put in over
- the last several years doing this?
- 23 A. I really don't. I mean, I started
- 24 working on this case -- you guys know these
- 25 proceedings go on. I started working on this

- 1 case, I think, five or six years ago. I really
- 2 don't know the total time.
- 3 Q. I mean, do you have -- you mentioned
- 4 staff at some point. How many people do you
- 5 have working for you on this project?
- 6 A. Oh, there's at least two that I
- 7 interact with regularly. They may have people,
- 8 you know, who help with some of the programming
- 9 and things, but I mean it's certainly hundreds
- of hours of my time and theirs, but beyond
- 11 that, I can't give you the -- how many
- 12 hundreds.
- 13 Q. Okay. And do you know how long it
- 14 takes to respond to a Bortz survey?
- 15 A. I don't know exactly.
- 16 Q. Do you have any idea?
- 17 A. I mean, I really don't know the exact
- 18 number of minutes. I have seen the questions.
- 19 I really -- I have not gone through it. I
- 20 would be guessing.
- 21 Q. Ten minutes, 15 minutes?
- 22 A. I really don't know.
- 23 Q. Okay. Do you think it compares to the
- 24 amount of time you put in to doing your
- 25 regression analysis?

- 1 A. I'm sure I spent more time doing the
- 2 regression analysis. Regressions by their
- 3 nature take a longer time to do than filling
- 4 out a survey. I mean, I don't make much of
- 5 that but --
- 6 O. Well, you've referred to the survey
- 7 responses as fine-tuned, precise, and refined.
- 8 A. I would --
- 9 Q. Working rather quick?
- 10 A. I would compare a survey response to
- one of the data points in the regression, not
- 12 to the process of running the regression.
- 13 That's more like the process of Bortz writing
- 14 the survey and taking the survey and running
- the analysis, right? I think a survey response
- 16 is a data point.
- 17 And it's a data point that let's a CSO
- indicate its value in a continuous way, rather
- 19 than just having these kind of discrete
- 20 decisions about what to carry. So I think it's
- 21 important that the two roughly corroborate each
- other, but given that, the Bortz survey lets
- 23 people give a precise valuation as opposed to
- 24 just a discrete carriage choice over a
- 25 generally small number of signals.

- 1 Again, I think they're both important.
- 2 I think, though, the key here is that they
- 3 are -- that there's corroboration.
- 4 Q. And corroboration, in your view, is
- 5 just that the top couple -- the top largest
- 6 categories match?
- 7 A. Yeah, as I've said, I think the keys
- 8 are that the top three categories -- the
- 9 ranking is the same. And at the very top, the
- 10 valuations are quite similar. I mean, again,
- 11 given my experience with regressions, that's a
- 12 really good match for marketplace data to what
- 13 a survey gives you.
- 14 Q. All right. Thank you. I have no
- 15 further questions.
- 16 JUDGE BARNETT: Thank you,
- 17 Mr. Cosentino.
- 18 Other cross-examination for this
- 19 witness? Mr. Olaniran.
- 20 CROSS-EXAMINATION
- 21 BY MR. OLANIRAN:
- Q. Good afternoon, Dr. Israel. My name
- 23 is Greg Olaniran and I represent Program
- 24 Suppliers.
- 25 A. Good afternoon.

- 1 Q. According to your testimony, one of
- 2 the tasks that you were assigned by the Joint
- 3 Sports Claimants to do was to review the Bortz
- 4 report that was done by Mr. Trautman; is that
- 5 correct?
- A. Yes, generally to review the results
- 7 for purposes of them seeing if they were
- 8 matched by market data.
- 9 Q. And on page 1 of your testimony, you
- 10 cite that the report assessed relative fair
- 11 market value of the different -- of the
- 12 different programming categories.
- Do you see that?
- 14 A. Where?
- 15 Q. It's on page 1, paragraph 6 of your
- 16 testimony. The point is you referred to
- 17 relative fair market value.
- 18 MR. LAANE: Are you referring to page
- 19 2, Greg?
- 20 MR. OLANIRAN: It might be.
- 21 BY MR. OLANIRAN:
- Q. Actually, yeah. I'm sorry, it's page
- 23 2.
- 24 A. Yeah, I found it.
- 25 Q. Thank you.

- 1 A. I see that, yes. And, I mean, I know
- 2 sometimes fair market value has a legal term.
- 3 I mean it in the sense of an economist as far
- 4 as what the value of the content would be in a
- 5 market -- in a free market.
- Q. Well, I just wanted to make sure that
- 7 when you used the phrase "relative fair market
- 8 value, " do you also mean the relative
- 9 marketplace value, which is the phrase that's
- 10 used fairly frequently in the course of these
- 11 proceedings?
- 12 A. Yeah, I do. As an economist, I'm not
- 13 distinguishing between those terms.
- 14 Q. Okay. And you've said that the Bortz
- 15 questions are the right questions. Do you
- 16 recall saying that?
- 17 A. Yes.
- 18 Q. And that -- that goes to the heart of
- 19 the matter. Do you recall that?
- 20 A. Yes.
- Q. I think you said also it's continues
- 22 -- it's -- it asks the right questions. I
- 23 think I said that. I'm trying to -- you used
- 24 quite a few different ways to describe Bortz.
- 25 I just wanted to make sure I capture that.

- So -- but, in essence, you believe
- that the Bortz survey results are evidence of
- 3 relative marketplace value of the different
- 4 categories of programming at issue in this
- 5 case, correct?
- 6 A. Correct.
- 7 Q. And before preparing your testimony,
- 8 did you review -- I think you said earlier you
- 9 didn't review the Bortz report for 2010 through
- 10 2013; is that correct?
- 11 A. I have reviewed the Bortz report for
- 12 this.
- 13 Q. Before you prepared --
- 14 A. Oh.
- 15 Q. -- your testimony, did you review the
- 16 2010 through '13 Bortz report?
- 17 A. I don't recall. I certainly have
- 18 reviewed it in the proceeding. I think before
- 19 my -- and certainly before I finalized my
- 20 testimony, I believe that I reviewed it.
- 21 Q. Do you recall whether or not you
- 22 reviewed it before you began preparing your
- 23 testimony?
- 24 A. I don't know that I read it before I
- 25 began preparing my testimony. As I mentioned

- 1 earlier, I certainly did my regression analyses
- 2 and things and designed the initial -- the
- 3 original regression having not seen the Bortz
- 4 results.
- 5 And I certainly now have reviewed the
- 6 Bortz results. There has been multiple rounds
- 7 of reports. So exactly when I had reviewed it
- 8 and how that lines up with the timing of the
- 9 original and rebuttal report, I don't remember
- 10 as I sit here. I think it was late in the
- 11 process of preparing the direct testimony.
- 12 Q. Okay. Did you review the -- the Bortz
- 13 survey results? And I'm distinguishing between
- 14 report itself and the survey results. Did you
- 15 have access to the survey results before you
- 16 began preparing your testimony?
- 17 A. Not before I began preparing it, but
- 18 certainly before I finalized it.
- 19 O. You saw the results before you
- 20 finalized your testimony; is that right?
- 21 A. I mean, there's tables with the
- 22 results in my testimony, so, yes.
- Q. And did you also -- in preparing your
- 24 testimony, did you review any of the completed
- 25 surveys?

- 1 A. I certainly didn't systematically go
- 2 through all the completed surveys. I had seen
- 3 the survey form. I don't remember if I saw one
- filled out by an actual respondent or not.
- 5 Q. But you did at some point before
- 6 completing your testimony review the survey
- 7 responses?
- 8 A. Before completing my testimony, I
- 9 certainly reviewed a survey and I had access to
- the data that gave the implied valuations from
- 11 Bortz. I did not -- I'm not saying that I went
- 12 through every line of the data that they
- 13 collected. I reviewed the survey and I
- 14 reviewed the ultimate results of the survey
- that are presented in the Bortz report.
- 16 Q. I'm actually asking about the
- 17 questionnaire -- the completed questionnaire
- 18 itself, whether or not you got a chance to
- 19 review it before completing your report.
- 20 A. Any completed questionnaire or --
- 21 Q. A completed questionnaire.
- 22 A. Yeah, as I said, I reviewed the
- 23 questionnaire forms. I don't recall whether I
- 24 reviewed one that was filled out or not. What
- 25 I'm certain I did was review the survey

- 1 instrument and then the summarized data.
- 2 Whether I reviewed a specific filled-out survey
- 3 form, I don't remember.
- 4 O. You have no recollection whatsoever
- 5 about reading a completed questionnaire with
- 6 allocations in it?
- 7 A. Yeah, I just don't remember whether I
- 8 saw one that was filled out by an actual
- 9 respondent or not.
- 10 Q. Do you recall the questions?
- 11 A. I mean, generally, yes. There's four
- 12 main questions.
- 13 Q. The questions that were in the
- 14 questionnaire, whether it's a completed one or
- 15 not?
- 16 A. Yeah, I recall there being four main
- 17 questions in the questionnaire. And I've gone
- 18 through those.
- 19 Q. Okay. And so you recall -- put up
- 20 6020, please, Exhibit 6020.
- 21 Can we go to Question 2b. I'm sorry,
- 22 is this -- I'm sorry.
- 23 JUDGE BARNETT: Are these individual
- 24 survey responses restricted?
- 25 MR. OLANIRAN: It is. But my question

- is not going to go specifically to the
- 2 responses, just the question itself.
- 3 Otherwise, we can close the door just to be
- 4 safe.
- JUDGE BARNETT: Well, the survey form,
- if it is restricted, is currently on view to
- 7 the world. And if you're going ask questions
- 8 about this that should be restricted in the
- 9 record, then we need to not only close the door
- 10 but restrict the record.
- So are you going to ask questions that
- 12 are not going to impinge upon any confidential
- 13 information?
- 14 MR. OLANIRAN: That is correct, Your
- 15 Honor.
- 16 JUDGE BARNETT: All right.
- 17 MR. OLANIRAN: And I will focus just
- on the question, on Question 2b, the text of
- 19 Question 2b, not the responses to Question 2b.
- 20 BY MR. OLANIRAN:
- Q. Are you okay?
- 22 A. Yes.
- Q. Have you had a chance to look at that
- 24 question?
- 25 A. Yes.

- 1 O. And so in this question, the
- 2 respondent has been asked a question about the
- 3 order of importance of certain program
- 4 categories to the system. Do you see that?
- 5 A. I do.
- 6 Q. And let's go to Question 3. I'll give
- 7 you a second to take a look at that.
- 8 A. Yeah. I mean, I'm familiar with this
- 9 question.
- 10 Q. Okay. And do you agree that the
- 11 Question 3 is asking the respondent, again, to
- 12 do some type of ranking based on how expensive
- 13 the programming is, right?
- 14 A. How expensive they think the
- 15 programming -- it would be to acquire the
- 16 programming, yes.
- 17 Q. Okay. And then let's go to Question
- 18 4a. And this is the constant sum question,
- 19 right?
- 20 A. I think that's what it has been
- 21 referred to, yes.
- 22 Q. Okay. And then Question 4a, the
- respondent is being asked the dollar amount the
- 24 respondent would have spent on each category of
- 25 programming in this particular year in

- 1 question, right?
- 2 A. Right. He's asked to estimate the
- 3 relative value and then ultimately asked what
- 4 -- of the fixed dollar amount, what percentage
- 5 would have been spent on each category, yes.
- 6 Q. Okay. Now, did each of these
- questions, 2b, 3, and 4, require the respondent
- 8 to have a particular type of market in mind
- 9 when they're responding to it?
- 10 A. My understanding is they're asking for
- 11 a given cable system that this person -- the
- 12 first question asks them if they were
- 13 responsible for purchasing content for a cable
- 14 system. And then 2, 3, and 4, I think, ask
- them to think about purchases for that cable
- 16 system.
- 17 O. Well, let me be more -- in Ouestion
- 18 2b, what market was the respondent supposed to
- 19 have in mind when responding to that question?
- 20 A. I'm not sure -- the only reason -- I
- 21 don't want to miss you. I'm not sure I know
- 22 what you mean by what market?
- Q. In other words, is it a market with
- 24 regulation where a Section 111 compulsory
- 25 license exists, or is it an unregulated market?

- 1 A. I mean, I think 2b, they're just asked
- 2 to rank sort of how they value this content for
- 3 their cable system.
- 4 O. So your testimony is that they weren't
- 5 supposed to have any particular market in mind;
- 6 is that right?
- 7 A. My understanding of this question is
- 8 they're just being asked to rank how important
- 9 they are to their cable system.
- 10 Q. I understand that. But is it your
- 11 testimony also that they were not supposed to
- 12 have any particular market in mind when they're
- 13 answering that question?
- 14 A. Yeah, I mean, if there's instructions
- above what's on the screen now, I don't recall
- 16 whether there was a reference to any market.
- 17 My recollection is they were just asked to rank
- 18 -- to think about their cable system and how
- 19 they would rank the relative importance of the
- 20 content for their cable system.
- Q. Well, let's -- and let's go to
- Question 3. And I think I'll ask you the same
- 23 question about Question 3.
- 24 Do you think the respondent was
- 25 supposed to have in mind a particular type of

- 1 market in responding to the how expensive
- 2 question?
- 3 A. Again, my recollection, and there may
- 4 be other instructions I'm not recalling, would
- 5 be they'd think about the purchase of that
- 6 content as it applied to their cable system.
- 7 So I think they would be thinking -- I don't
- 8 know if they were directed a certain type of
- 9 market interaction, but I think they were asked
- 10 just, in their view, how expensive it would be
- 11 to acquire content of this type in their, you
- 12 know, sort of professional responsibility of
- 13 acquiring content for their cable system.
- 14 Q. So in formulating your approach to
- 15 what you were asked to do by Joint Sports
- 16 Claimants, it wasn't important to you, with
- 17 respect to Question 2 or Question 3, whether or
- 18 not the respondent had a particular market in
- mind in responding to those questions?
- 20 A. I understood Question 2 and 3 to be of
- 21 a nature I see in lots of work when we -- when
- 22 I work with survey experts, that they ask
- 23 certain -- sometimes called warm-up questions,
- 24 to get people thinking about the type of
- 25 content or the type of product at issue.

- 1 So I understood and left to the survey
- 2 expert that idea of warm-up questions. And I
- 3 focused my attention on valuations as described
- 4 at Ouestion 4.
- 5 O. So the answer to my question is that
- it was not important to you whether or not they
- 7 had a particular market in mind?
- 8 A. For Ouestions 2 and 3, I think that's
- 9 correct in the sense that they were -- I
- 10 understood them to be warm-up questions and I
- 11 defer to the survey experts on asking good
- 12 warm-up questions.
- 13 Q. Let's talk about Question 4 then. And
- 14 with regard to Question 4a, was the -- was the
- 15 respondent supposed to have a particular type
- 16 of market in mind, whether the market was
- 17 regulated or not regulated?
- 18 A. I mean, no. It appears to me they
- 19 were -- what they were supposed to have in mind
- 20 is the relative value to their cable system
- 21 therefore, if they divided up that relative
- 22 value, what they would spend.
- 23 Q. So --
- A. My job as an economist, I think, is to
- 25 take those relative values and infer what they

- 1 mean about the marketplace, as I understand the
- 2 marketplace would exist based on my work in
- 3 this industry.
- Q. I understand. My question is whether
- 5 in formulating a response to that question,
- 6 whether or not a respondent was supposed to
- 7 have a particular type of market in mind, be it
- 8 regulated or unregulated market.
- 9 A. I mean, I think they are just being
- 10 asked if you had to divide up based on your
- 11 value -- it's quite clear at the beginning of
- 12 the question -- if you were going to divide up
- dollars based on your relative value, not
- 14 mentioning a specific marketplace, just divide
- 15 up what it's worth to you across these six
- 16 categories, how you would do it.
- 17 Q. So, again, it wasn't important -- in
- 18 formulating the analysis of marketplace
- 19 behavior, it wasn't important to your analysis
- 20 whether or not the respondents had in mind a
- 21 particular type of market?
- 22 A. I mean, I think of this as measuring
- 23 the value place by the buyer, right? So I --
- 24 in various ways in my work all the time, I
- think about measuring the value buyers place on

- things. And then it's my job as an economist
- 2 to think about what that would say about the
- 3 marketplace.
- 4 So I don't take this as the -- it's
- 5 not -- the answer to your question is no, I
- 6 don't take it as important for the buyer to do
- 7 the work of understanding what the marketplace
- 8 will look like. I think it's important for the
- 9 buyer to indicate his or her valuation on the
- 10 product.
- 11 Q. So what the respondents -- well,
- 12 strike that.
- Do you think the respondents should
- 14 have had a market in mind when responding to
- 15 these questions or no?
- 16 A. I think the buyer should have the how
- 17 valuable they think the content is and
- 18 something like their willingness to pay for the
- 19 content in mind.
- 20 JUDGE STRICKLER: Did you have an
- 21 understanding as to whether or not --
- 22 objectively from looking at the questions,
- 23 whether the respondents should do their
- 24 relative valuation of these distantly
- 25 retransmitted categories based on already

- 1 having other channels and other programming in
- their cable system or that they should consider
- 3 this sort of ab initio, if they were creating a
- 4 cable system, or value it in some other order
- 5 of arrival, if you will.
- 6 THE WITNESS: I mean, my -- I think
- 7 the way I would understand it would be they
- 8 would have in mind the other content they have
- 9 on their cable system, and this would be
- 10 additional content.
- 11 The reason I have that in mind --
- 12 sorry.
- JUDGE STRICKLER: That's okay. Please
- 14 go ahead.
- 15 THE WITNESS: -- is just I do work a
- 16 fair bit with people who do these sorts of
- 17 purchasing decisions in other contexts. And
- 18 even if they're buying the cables -- you know,
- 19 they negotiate sort of quarterly with some
- 20 cable network system, and so they're going to
- 21 go negotiate with Disney, they have in mind the
- 22 content we have, and Disney is now going to be
- the incremental content because that's who
- 24 we're negotiating with.
- So in my experience, the way they

- think about these is one at a time, this is now
- 2 the one on the margin, as we'd say as an
- 3 economist, and I'm thinking about its value,
- 4 given the stuff that I've already contracted
- 5 for.
- 6 So that was my understanding, and I
- 7 think that's how one of these purchasers would
- 8 think about it.
- 9 JUDGE STRICKLER: So you wouldn't do
- 10 it in sort of a heuristic Shapley value type of
- 11 situation; you're saying they already come to
- this or at least it's your understanding that
- the question presupposes an existing complement
- of programs on the Disney Channel, on ESPN, on
- 15 all the other -- the other program channels
- 16 that they have and now they're going to value
- 17 these distantly retransmitted programs in their
- 18 categories with the assumption that they
- 19 already have the prior programming?
- 20 THE WITNESS: That's right. That's
- 21 how I think about it because that's how I see
- these guys in practice when they go to any of
- these negotiations. They're sort of one of the
- 24 time. They've nailed down the last one. And
- now it's I've got to come and negotiate with

Disney, given that I've got the last one. 1 they run valuations based on that. 2 That's just -- I think that certainly 3 is my understanding. And I think that's how 4 they think about it. 5 JUDGE STRICKLER: That certainly doesn't sound like an unreasonable way to 7 approach it. Do you really see anything in the 8 -- in the structure of the question that would 9 lead a respondent to presuppose that they 10 already had the prior programming? Or is that 11 12 just your -- just your informed assumption 1.3 based on your own industry expertise? THE WITNESS: I mean, certainly, it's 14 15 more the latter in my case. I have not -- I mean, I -- like we could -- obviously, the 16 document speaks for itself, and I don't recall 17 18 if there was a specific statement that said assume that you have it. But my opinion on 19 20 that is really based on just my experience and 21 how these guys think about acquiring content. JUDGE STRICKLER: You said earlier 22 23 that you -- one of the reasons why you were -what you were doing was trying to confirm the 24

accuracy of the Bortz survey is because you

1	thought the Bortz survey asked the right
2	questions and narrowing in on the particular
3	question, which is the constant sum question.
4	THE WITNESS: Yeah.
5	JUDGE STRICKLER: Do you think it lays
6	out that foundation as to whether or not the
7	existing program line-ups were already there,
8	the Disney, as you say, the ESPN and the
9	others, or do you think this question is
10	ambiguous in that regard such that the
11	respondent doesn't have enough information to
12	determine what the contours of the existing
13	channel selection are before they answer the
14	question?
15	THE WITNESS: No, I understand your
16	question.
17	So, I mean, I guess, when I read this
18	question in the context of the way I see
19	purchasing done in this industry and it says
20	assume you spent a fixed dollar amount and what
21	percentage would you spend, my understanding is
22	just I think the person who was in charge of
23	doing the purchasing would do these sorts of
24	negotiations all the time and they do I
25	think they would generally see it as

- 1 conditional on what they have. But I don't
- 2 know, as I sit here, whether there's a specific
- 3 line in the question that says that or not. I
- 4 don't remember.
- 5 Throughout -- I will say that
- 6 throughout my entire analysis, I have had in
- 7 mind the way -- because, obviously, what we
- 8 need to do is think about what a market would
- 9 look like, right? And so the way I've thought
- 10 about what a market would look like is there's
- 11 an existing market for cable networks that
- works a certain way in which they negotiate,
- 13 they figure -- you know, they sort of have a
- 14 willingness to pay that gets divided up between
- 15 them and the provider.
- 16 And there I know that what they do is
- 17 negotiate for each of them conditional on
- 18 having the other stuff in mind. So what I've
- done for myself is port this into that world
- 20 and here leave it to the survey expert what
- 21 they put in the question, but my understanding
- that that would match what they do is just that
- 23 that's the way -- for me, that's the way I see
- 24 these guys do purchasing.
- JUDGE STRICKLER: Thank you.

- 1 BY MR. OLANIRAN:
- 2 Q. Do you -- I want to ask you, you
- 3 talked a second ago and certainly quite a bit
- 4 of your analysis is based on cable networks.
- I want to talk about the broadcast
- 6 signals.
- 7 A. Okay.
- 8 Q. Okay? So in your analysis, did you
- 9 focus at all on what broadcast signals would
- 10 look like absent the compulsory license?
- 11 A. I mean, not the explicit legal regime.
- 12 As I said, I think broadcast networks are now
- 13 -- also negotiated through a very similar
- 14 procedure that determines what gets paid for
- things like retrans fees, and so I, again,
- 16 ported this into that world in which you're
- 17 negotiating over the price of a network.
- 18 Q. Well, let's assume then that the
- 19 Section 111 license did not exist and we had a
- 20 market in which -- what market -- what would
- 21 the market look like in your vision of the
- 22 market structure where Section 111 didn't
- 23 exist? Who would the buyer of programs be?
- 24 A. You mean --
- Q. Under your approach to this

- 1 marketplace behavior?
- 2 A. Sure. And I'm sure there has been
- 3 lots of views and testimony, but my mental
- 4 model is the model for -- that currently exists
- 5 for the licenses to retransmit broadcast
- 6 networks for cable networks.
- 7 So in the case of broadcast networks,
- 8 it's through retrans fees, which today are
- 9 often bundled with cable networks or for cable
- 10 networks. In either case, there is a
- 11 negotiation between a content provider and a
- 12 CSO or a broader cable system for a price per
- 13 subscriber per month for the network of content
- 14 as a network. So that's the way that I've --
- to me, it's natural to think about these
- 16 distant signals as one more network that would
- 17 be part of that cable system/content provider
- 18 negotiation.
- 19 Q. So your vision of the market, though,
- 20 that would be the content provider, the
- 21 copyright owner in this case, would be
- 22 licensing the program to the broadcast signal;
- 23 is that right?
- 24 A. Yes. So in my vision of the way
- 25 things work today, the network, be it a

- 1 broadcast network or cable network, puts
- 2 together a bundle of programming for which they
- 3 have to acquire copyrights.
- 4 Q. Are you equating broadcast networks
- 5 and cable networks in this hypothetical market?
- 6 A. I don't know what you mean by
- 7 "equating."
- 8 Q. Are you treating them the same?
- 9 A. Only in the sense that I -- what I see
- in the marketplace is cable systems negotiating
- 11 with networks, be that broadcast networks or
- 12 cable networks. They're clearly not exactly
- 13 the same content, but in both cases, I see
- cable systems negotiating with networks as
- 15 networks.
- 16 Q. Are cable systems -- are cable
- 17 networks FCC-regulated as are broadcast
- 18 signals, broadcast stations?
- 19 A. Now you're going to get beyond all the
- 20 regulations I know. There certainly is FCC
- 21 oversight in both cases. In -- in the --
- 22 specific FCC rules are different, I think, for
- 23 broadcast networks and cable networks, but all
- 24 I'm saying is that in both cases I see cable
- 25 systems negotiating with networks as networks,

- 1 not as separate copyright owners.
- Q. And, again, in this marketplace of
- your framework, who is the buyer in that
- 4 marketplace and what are they buying?
- 5 A. CSO is the buyer and they're buying --
- and, again, now we're going to get into whether
- 7 I have the legal words right, but in my head,
- 8 they're buying the licenses or whatever it
- 9 takes to be able to show that content on their
- 10 cable system.
- 11 Q. So the CSOs are buying the content
- directly from the copyright owner or are they
- 13 buying from -- are they buying from -- who are
- 14 they buying from?
- 15 A. From the network.
- 16 O. What network?
- 17 A. They're buying from -- if it's a cable
- 18 network, it is a cable network. If it's a
- 19 broadcast network, they may be buying from a
- local affiliate or a set of local affiliates or
- 21 the network itself, in the case of the ONOs,
- 22 but they're buying from a network that may be a
- 23 national network or may be a set of localized
- 24 networks, but in each case, they're buying from
- 25 a network provider who provides a set of

- 1 contents.
- Q. Are they buying the entire signals or
- 3 are they buying individual programs?
- 4 A. Entire signals in general.
- 5 Q. Okay. So -- but what you're saying is
- 6 a cable system is going to be acquiring an
- 7 entire signal from a broadcaster or some other
- 8 type of cable network; is that a fair way to
- 9 describe it?
- 10 A. I mean, that's how I see the
- 11 marketplace working today for content other
- 12 than these distant signals.
- 13 Q. Okay. Now, with respect to the
- 14 content that the broadcaster is -- is carrying,
- where is the broadcaster getting that content
- 16 from?
- 17 A. Now we're beyond things that I've
- 18 analyzed closely. My understanding would be
- 19 that they're putting together, you know,
- 20 programs and other things for which they are
- 21 acquiring copyrights. But, frankly, the
- 22 process of how the network puts together the
- 23 content and all those negotiations is not
- 24 something that I have studied or worked on as
- 25 closely.

- 1 Q. You haven't focused on how
- 2 broadcasters acquire content that ultimately
- 3 winds up in a bundle to the cable system; is
- 4 that correct?
- 5 A. Not in great detail. I understand
- 6 that they negotiate with, you know, content
- 7 providers who -- for whom they have to acquire
- 8 rights and there's detailed, long contracts
- 9 about what rights they do and don't have to
- 10 redistribute that content. But beyond -- I
- 11 don't know if there's more to your question
- 12 than that.
- 13 Q. But in your view, the market -- the
- 14 way the market is currently structured would
- 15 remain the same, except that the way that the
- 16 compensation would be structured would be
- 17 different; is that right?
- 18 A. I'm not sure what you mean by "remain
- 19 the same."
- 20 Q. In other words, a broadcaster would
- 21 acquire content from somewhere to fill up their
- 22 broadcast, their daily -- their broadcast day,
- 23 if you will, and then the cable system would
- 24 make a deal with a broadcaster to retransmit
- 25 that particular station?

- 1 A. I mean, that certainly is the mental
- 2 model I've had in mind. I mean, my analysis is
- 3 ultimately an analysis of relative value for
- 4 content.
- 5 So, I mean, we could go to another
- 6 type of hypothetical market you have in mind,
- 7 then I still think the relative -- as long as
- 8 there's negotiations for content and the CSO is
- 9 buyer of some content, I don't think it would
- 10 change anything in my analysis.
- 11 We could talk about specific cases if
- 12 you want, but certainly the mental model that
- 13 I've had in mind has been porting it into the
- 14 existing kind of broadcast network or cable
- 15 network process in which the CSO is a buyer,
- 16 they buy the rights to a network, and the
- 17 network has separately put together the rights
- 18 to sell that content.
- 19 O. But you haven't given any thought to
- 20 that primary market where the individual or
- 21 multiple programs are acquired by the broadcast
- 22 network in this case?
- A. But it's fair to say that my analysis
- 24 has treated the CSOs as the ones making choices
- 25 and the CSOs as the buyers. And I have not

- done an analysis, a separate analysis of what
- you're calling the primary market.
- 3 Again, as I said a minute ago, I think
- 4 ultimately you're going to -- you know, the
- 5 relative -- I don't see that the relative
- 6 valuations of the content I have here wouldn't
- 7 ultimately be the relevant values, but I have
- 8 not done a separate analysis besides what's
- 9 presented in my reports.
- 10 And my reports focus on the CSO as the
- 11 buyer of a network.
- JUDGE STRICKLER: And because your
- 13 reports and your regression deals with the
- 14 market as it exists, you're not showing us what
- 15 might happen through your regression in a
- 16 hypothetical market; you're showing us what
- 17 actually -- what choices are actually made in
- 18 terms of implicit or shadow prices based on
- 19 what cable system operators have, in fact, done
- 20 in terms of the signals that they decide to
- 21 distantly retransmit?
- 22 THE WITNESS: I think that's fair. I
- 23 mean, I'm using -- the only thing I would add
- 24 to it -- and apologies if this was obvious in
- 25 the question -- but I'm using the existing

purchase choices as a way to infer value. 1 But when I say -- I mean, obviously as 2 an economist, I have to think about, you know, 3 how does that value map into some hypothetical free market? And as I said earlier, what I 5 have in mind is -- for that hypothetical free market is a negotiation between a CSO and a 7 network, although I think it could be a 8 negotiation between a CSO and a set of content 9 providers. 10 What matters is, in an economic model 11 of that negotiation, they're dividing up the 12 13 buyer's willingness to pay and so those valuations -- I think of the relative 14 valuations as being the key determinant of what 15 the relative negotiated prices would be in that 16 17 free market. So you're saying if 18 JUDGE STRICKLER: the signal was, based on your analysis that --19 or you could apply your analysis even to a 20 21 disaggregated situation where rather than importing -- retransmitting this signal and 22 23 purchasing the signal in its entirety, a cable system that decided to negotiate separately 24 25 with each -- programs within each category

would still -- in that hypothetical framework, 1 still come up with the same relative 2 valuations; is that you're saying? 3 THE WITNESS: I think so because the -- I think those negotiations would have 5 more transactions costs and be more difficult negotiations, but, you know, sort of basic 7 models of bargaining and economics that you're 8 splitting up the buyer's willingness to pay. 9 10 So as long as you've measured the buyer's willingness to pay across categories of 11 content, I think whether those are prebundled 12 for you or separated out, I think the key 13 14 driver would still be those relative 15 valuations. MR. STRICKLER: Now, if you were going 16 to try to map it onto this kind of 17 disaggregated negotiation, wouldn't viewing of 18 the individual programs within the categories 19 then become of greater importance? In other 20 words, if I'm a cable system operator and I 21 think I want a syndicated show, I'm going to 22 negotiate one price for a syndicated show that 23 I think people are more apt to watch because 24 that might be a proxy for subscribership, 25

whereas a program that people are not watching 1 in their local market, maybe that's not going 2 to happen -- even though I like that category, 3 it may be a really lousy show within that category, so I'm not going to pay for it. 5 So doesn't -- if you disaggregated in 6 that manner, doesn't viewing then become of 7 relatively more importance than if you keep it 8 aggregated at the signal level? 9 10 THE WITNESS: I'm going to think for one second just to --11 12 JUDGE STRICKLER: Absolutely. I think -- I mean, in 1.3 THE WITNESS: general, I think my view on viewing is that 14 viewing is some indicator of popularity of some 15 programs, but it still is not the value to a 16 cable system. Right? 17 A cable system still might want a 18 program that has relatively little viewing 19 because it diversifies its offering, and so 20 21 even if you disaggregate, if you have two things that -- two shows that hit exactly the 22 23 same spot, but one has more viewing than the other, I'm not saying that's irrelevant, but I 24 25 still think the valuations are about a lot more

than viewing; they're about diversification. 1 And I -- I know -- you look like you 2 have another question, so --3 JUDGE STRICKLER: Go ahead, please. 4 THE WITNESS: The -- and I certainly 5 think that when you rolled it up, I almost think in that world you could think the CSO 7 8 sort of rolling up to like categories of content. And I still think when you still roll 9 it up, the same basic forces would apply as far 10 as what's the overall value of that category of 1.1 content in terms of how it diversifies my 12 offering. 13 JUDGE STRICKLER: But when -- assuming 14 15 you were disaggregating and you were 16 negotiating with individual content providers, 17 if you had two different shows, there was a niche sewing program, which didn't have a whole 18 19 lot of viewership but you thought you could get some marginal subscription revenue from that, 20 all other things being equal, wouldn't you want 21 the sewing program that has three times the 22 viewership than another sewing program? 23 24 THE WITNESS: If literally everything 25 else is held equal, they're the same sewing

- 1 program, just one has a better host so it has
- 2 more viewing, then I think I agree that viewing
- 3 would be a factor there.
- 4 But I think that when you start
- 5 thinking about sewing programs that are
- 6 somewhat different and then you roll them up to
- 7 say all syndicated programs that include sewing
- 8 and cooking and every other type of
- 9 programming, then it would be about -- much
- 10 more about the diversified bundle unless -- it
- 11 wouldn't be about the sum of the viewing.
- JUDGE STRICKLER: Thank you.
- 13 BY MR. OLANIRAN:
- Q. And just to be clear, your idea of the
- 15 hypothetical market is that the buyer would be
- 16 the CSO and the CSO could either acquire an
- 17 entire bundle in the form of a station or
- 18 actually purchase individual content from
- 19 copyright owners; is that correct?
- 20 A. I mean, my view of the market that
- 21 I've had in mind is I think -- through the
- 22 analysis, has been an analogue to what exists.
- 23 So I think the most natural view of the market
- is CSOs buying networks of content.
- The only addition I was making in

- 1 response to the question is that I think as
- 2 long as the -- however the CSO aggregates up,
- 3 as long as the CSO is aggregating up these
- 4 categories of content that we're talking about,
- 5 the same relative value calculations would
- 6 drive the relative payments.
- 7 Q. And under what circumstance would the
- 8 CSO be buying individual content as opposed to
- 9 acquiring entire signals?
- 10 A. I haven't thought about a specific
- 11 circumstance. I think the most natural way to
- 12 model the market, because we have an existing
- 13 market -- we have an existing free market for
- 14 the vast majority of what CSOs purchase.
- So I think the natural way to model
- 16 that market is the CSO buying the network of
- 17 content, the signal as a whole.
- 18 Q. And it would be very unusual, would it
- 19 not, for a CSO to actually acquire individual
- 20 content unless it was actually building its own
- 21 signal or network, if you will?
- 22 A. I don't know -- I mean, I don't want
- 23 to overstate it. So I don't know if there are
- 24 cases where that happens for certain programs.
- 25 I certainly agree, as I just said, that the

- 1 case that I know best that seems to be the
- 2 common case is that a CSO buys an entire signal
- 3 or an entire network.
- 4 Q. And you used the phrase "aggregating
- 5 up the content." Could you explain what you
- 6 mean by aggregating up the content?
- 7 A. Let me just -- at various points in
- 8 the marketplace, people buy rights to content
- 9 and put them together into shows and then
- 10 networks. I'm just saying that, again, I think
- 11 the natural way to model it is the way that it
- 12 generally exists, which is that CSOs buy
- 13 networks or buy signals.
- 14 But if they aggregate -- if they
- 15 purchase it in some more disaggregated way,
- buying shows and roll them up, I don't think
- 17 that would change any of my answers.
- 18 Q. I also want to follow up on another
- 19 discussion you had earlier today regarding
- whether you saw the Bortz 2013 report before
- 21 preparing your report. I think you said that
- 22 you did not.
- 23 And so my -- you did say, however,
- that before you prepared your report, you saw
- 25 Dr. Waldfogel's testimony. Is that correct?

1 MR. LAANE: I'm going to object that

- 2 it misstates his testimony.
- 3 THE WITNESS: I'm certain I saw the
- 4 Bortz 2010 to 2013 report before I prepared my
- 5 report. Again, as I mentioned a minute ago,
- there are numbers from that report in my
- 7 report.
- I think what I said in response to
- 9 some questioning from the Judges was that I
- 10 started from the Waldfogel process and I put
- 11 together my regression methodology before I saw
- 12 the Bortz survey results. I was working on it
- as far back as five or six years ago.
- 14 So, yeah.
- 15 BY MR. OLANIRAN:
- 16 Q. And I may have misstated, but you did
- 17 not see the Bortz 2010 through '13 report
- 18 before you started preparing your report?
- 19 A. Did not see it before I started
- 20 because I would take "started" as meaning
- 21 beginning my regression approach and planning
- 22 my regression. I certainly -- I mean that
- 23 process started years before there was a Bortz
- 24 report.
- 25 JUDGE STRICKLER: But you saw the

- Bortz 2010-2013 results before you completed
 your methodology?
 THE WITNESS: Correct, before I
- 4 completed my report. I had run regressions
- 5 before I ever -- the basic regressions you see
- 6 here before I ever saw the Bortz results.
- 7 JUDGE STRICKLER: Did you change your
- 8 report after you saw the Bortz results?
- 9 THE WITNESS: The main regression, I
- 10 believe, I don't want to misstate, the
- 11 sensitivities had been in place for quite
- 12 sometime, before --
- JUDGE STRICKLER: So your answer is
- 14 no, you didn't make any changes to your own
- 15 report or analysis after you saw the results of
- 16 the Bortz 2010-2013 study?
- 17 THE WITNESS: Certainly not to the
- 18 regression analysis. There were changes to the
- 19 report, right.
- 20 JUDGE STRICKLER: Any changes of
- 21 substance?
- THE WITNESS: No. When I say changes
- 23 to the report, I just mean I added the tables
- and the analysis doing the comparison, but no
- changes to my methodology.

JUDGE STRICKLER: And no changes of

- 2 substance?
- 3 THE WITNESS: Correct.
- JUDGE STRICKLER: Thank you.
- 5 BY MR. OLANIRAN:
- 6 Q. And did you -- in your research
- 7 process before you began preparing your report,
- 8 did you look at the '04-'05 Bortz report?
- 9 A. I -- I certainly saw the results from
- 10 that report. I don't recall as I sit here
- 11 whether I read that report from cover to cover.
- 12 Q. Did you, in reading Dr. Waldfogel's
- 13 report -- it certainly made a lot of references
- 14 to the '04-'05 Bortz report, did it not?
- 15 A. Yes.
- 16 Q. Okay. With regard to your regression
- 17 analysis, and I think -- now, are you offering
- 18 the regression analysis as independent evidence
- 19 of marketplace value or only as corroborative
- 20 of the Bortz survey?
- 21 A. I'm offering my regression as
- 22 corroborative of the Bortz survey.
- Q. Only as corroborative?
- 24 A. That's my view, correct.
- 25 JUDGE STRICKLER: Does that mean if

- there was no Bortz survey, you wouldn't hold
- 2 out your regression results as indicative of
- 3 appropriate value?
- A. No, if there was no Bortz survey, then
- 5 I think you would look to the regressions that
- 6 exist as the best measures that we have. My
- 7 statement is only that, given there is a Bortz
- 8 survey and that it asked the direct question, I
- 9 think in that context, the right way to treat
- 10 the regression is as corroborative.
- 11 JUDGE STRICKLER: Again, a
- 12 hypothetical. There is no Bortz survey. You
- did your report and didn't rely on the Bortz
- 14 report and you didn't see -- you didn't change
- 15 your methodology or your results in any kind of
- 16 substantive manner, as you just testified,
- 17 after you saw it.
- 18 So if the Bortz report never existed,
- 19 would you be holding out your regression as
- 20 good evidence of relative value for this
- 21 proceeding?
- 22 THE WITNESS: I mean, I think it's
- 23 fair. My regression, I also think Dr. Crawford
- 24 did a good regression. So I think my view
- 25 would be in that hypothetical world, I would

- think those are the two best pieces of evidence
- 2 that have been presented.
- JUDGE STRICKLER: Okay.
- 4 BY MR. OLANIRAN:
- 5 Q. So then you're saying that it's not
- 6 independent of -- it's not simply
- 7 corroborative; it's an independent evidence of
- 8 marketplace value?
- 9 A. I was asked a hypothetical, if there
- 10 was no Bortz report. And I think that my
- 11 regression would provide and Dr. Crawford's
- would provide the best evidence in the record.
- Given that there is a Bortz report, my
- 14 view is that my regression should be used as
- 15 corroborative of the Bortz report.
- 16 Q. I think you're saying that it's both
- independent and dependent and corroborative?
- 18 A. I'm saying my answer depends on which
- 19 world we're in. As I've said today, I think,
- 20 given the question that Bortz asks, given the
- 21 detail with which it can measure the
- 22 valuations, I consider it to be the best
- 23 evidence available.
- 24 So if better evidence exists, then I
- think it's natural to say, well, that's a

- 1 survey. Was the regression generally
- 2 corroborated?
- 4 exist, I would have to think about what's the
- 5 best thing that's left.
- 6 Q. Well, let me ask you differently.
- 7 What if the survey existed and the Judges
- 8 didn't find the Bortz -- the Bortz survey
- 9 acceptable? Would you still -- would your
- 10 regression analysis still be considered
- 11 evidence of marketplace value?
- 12 A. I mean, I think that's analogous --
- obviously, the Judges make the decision. So if
- 14 they took the Bortz survey out and decided, for
- whatever reason, they weren't going to rely on
- 16 it, I think -- my testimony is I think the
- other best pieces of evidence in the record are
- 18 my regression and Dr. Crawford's regression.
- 19 So at that point, I think those would be the
- 20 best remaining things to rely on.
- JUDGE STRICKLER: That's because you
- 22 don't see any other survey evidence in the
- 23 record after your own analysis of that survey
- 24 evidence that that's more persuasive, more
- 25 probative than the regressions?

- 1 THE WITNESS: Right. I do think it's
- 2 important that the survey analysis be
- 3 corroborated by marketplace evidence. Many
- 4 people have raised many questions about the
- 5 various surveys. So if I've seen a survey like
- 6 the Horowitz survey that I don't think is
- 7 corroborated by the marketplace evidence, then
- 8 I think I wouldn't want to rely on that.
- 9 BY MR. OLANIRAN:
- 10 Q. And what are you referring to as the
- 11 marketplace evidence exactly? Is it your
- 12 regression or -- and what else?
- 13 A. I think it's my regression -- I mean,
- 14 it's what's in my report. So I think
- 15 ultimately the marketplace evidence is my
- 16 regression, my cable content analysis for the
- 17 two propositions that I put that forward for,
- 18 that an hour is not an hour, it depends on
- 19 value, and sports hours tend to have more
- value. So I think that's marketplace evidence
- 21 of those two phenomena.
- 22 And I think as I've referred many
- 23 times in my reports to the Crawford regression,
- that's another piece of marketplace data.
- There may be more. I might not be remembering

- 1 everything in my reports. The reports speak
- 2 for themselves. But that's what I'm thinking
- 3 of now.
- Q. So your key pieces of marketplace data
- is your regression, your cable content analysis
- 6 and Dr. Crawford's analysis?
- 7 A. Those are the ones -- again, my two --
- 8 my direct testimony and rebuttal testimony
- 9 speak for themselves. Those are the ones I'm
- 10 recalling now. And, certainly, I think all
- 11 three of those are important marketplace
- 12 evidence.
- 13 O. And were you aware that Dr. Crawford
- was going to file testimony in this case at any
- point during the preparation of your report?
- 16 A. Certainly nothing in my first report
- 17 changed. I think I found out that there was --
- 18 Crawford was the expert. I know Greq. We went
- 19 to graduate school together. But I think I
- 20 found that out like a day before my report was
- 21 filed or the day it was filed.
- 22 O. You're talking about your rebuttal
- 23 testimony or your direct testimony?
- 24 A. Direct testimony. It might have been
- 25 when they got exchanged. I don't remember. It

- 1 was definitely after my report was finalized
- 2 and I found -- or at the very end I found out
- 3 -- I knew there would be testimony from
- 4 commercial and from the other Claimants, and I
- 5 found out very late in the process that it was
- 6 the Crawford testimony.
- 7 Q. Just quickly about your regression.
- 8 The coefficients that you calculate for each
- 9 program category represent the value of each
- 10 additional minute; is that a fair way to
- 11 describe it?
- 12 A. I think we refined it some to be
- 13 better. I think the right way to say it is
- 14 that they are the average valuations of
- incremental sets of minutes that CSOs purchase,
- 16 holding everything else constant. So,
- 17 ultimately, I think they're best used as
- 18 measures of the relative valuation of -- the
- 19 relative average valuation of these minutes.
- Q. And in terms of what this coefficient
- 21 means, is it fair to say that the variations in
- the level of royalty fees are explained by the
- variations in the additional minutes of each
- 24 type of programming? Is that a fair way to
- 25 characterize it?

- 1 A. No, I think a fair way to characterize
- 2 the regression generally is that it explains
- 3 variation across cable systems and over time in
- 4 royalty fees as determined by variation in the
- 5 number of minutes, as well as variation in the
- other control variables that primarily measure
- 7 the size of the system.
- 8 Q. Setting your regression analysis
- 9 aside, do you have a basic understanding of how
- 10 royalty payments are determined under Section
- 11 111; is that correct?
- 12 A. Say that again -- under Section 111?
- 13 Q. I'm sorry. Under the compulsory
- 14 licensing scheme?
- 15 A. Yes.
- 16 Q. And in your hypothetical market, would
- 17 a compulsory licensing scheme still exist?
- 18 A. No.
- 19 Q. Okay. And how, just in general terms,
- 20 what your understanding is of how royalty
- 21 payments are calculated?
- 22 A. Under the compulsory licensing scheme?
- 23 Q. Yes.
- 24 A. I mean -- and, again, my report talks
- about Form 3 CSOs. My general understanding is

- there's -- the royalty payments are a
- 2 multiplicative percentage of the gross receipts
- of the CSO. I think there's a minimum of, I
- 4 think, 1.064 times the gross receipts, a
- 5 percent of the gross receipts, and then it
- 6 scales up, but at a decreasing rate as you add
- 7 more signals.
- 8 Q. So, basically, the royalty fees are
- 9 based on such totally prescribed formula for --
- that the cable systems follow, correct?
- 11 A. That's correct.
- 12 Q. And it's the type of stations,
- 13 correct? You consider the type of stations
- 14 that the system is carrying, right?
- 15 A. You mean in terms of what its DSE
- 16 equivalent is?
- 17 Q. Right.
- 18 A. Yes.
- 19 Q. And then you look at the gross
- 20 receipts, correct?
- 21 A. Yes.
- 22 O. And several other factors that are
- 23 prescribed within the statute and the
- 24 regulations, correct?
- 25 A. I mean, I think it's basically gross

- 1 receipts, what the DSE equivalent is, and then
- this measure of how many DSE equivalent signals
- you're carrying. I think those are the basic
- 4 factors. And there's also certain rules about
- 5 these 3.75 percent systems, but --
- Q. Okay. And so to the extent there are
- 7 variations in the royalty payments made by
- 8 cable systems, that will be based on changes
- 9 within carriage, perhaps; let's say they're
- 10 carrying five signals versus no signals at all,
- 11 right?
- 12 A. Right. As I've said, I think the
- 13 variation that I'm studying that drives my
- 14 results is the decision about what signals to
- 15 carry.
- 16 O. And, in fact, the factors that you
- 17 need to calculate royalty obligations under the
- 18 compulsory licensing scheme are completely
- 19 agnostic to the mix of programming you're
- 20 carrying; isn't that right?
- 21 A. I mean, the formula doesn't
- 22 distinguish -- well, other than the -- the DSE
- 23 equivalents, that may be different for, you
- 24 know, network versus public versus -- but other
- 25 than that, the formula doesn't distinguish --

- 1 the formula is based on how many signals you
- 2 choose. Of course, you as a CSO have to decide
- 3 what type of signals to carry, given the
- 4 implied price.
- 5 Q. In fact, if you carried no distant
- 6 signal or you're carrying one independent
- 7 signal with 100 minutes of sports, you're still
- 8 going to pay the same thing, correct?
- 9 A. I think if you're up to the minimum
- 10 payment, you pay the minimum payment.
- 11 Q. That would be a yes?
- 12 A. I was just trying to clarify, but,
- 13 yes, anything up to and including the minimum
- 14 payment pays the minimum payment.
- 15 O. Now, you said this a few times and I
- 16 want to make sure I get this right. You said
- 17 earlier that what your cable content analysis
- 18 shows is that an hour is not just an hour and
- it depends on what type of programming you're
- 20 carrying. Do you recall that?
- 21 A. Yes.
- 22 Q. And what do you mean by an hour is not
- 23 an hour?
- 24 A. I mean you can't just add up the
- 25 number of hours carried or the number of hours

- 1 viewed and say that that determines value
- 2 because the value per hour differs for
- 3 different types of content.
- 4 Q. And why do you say that? Why does it
- 5 differ?
- A. That's the various evidence throughout
- 7 my report, shows that people in various
- 8 contexts pay more per hour for different types
- 9 of content.
- 10 Q. I understand that part of it. Why do
- 11 they pay more for different types of content?
- 12 A. There could be multiple reasons. The
- 13 different content serves different needs for
- 14 them for their CSO.
- 15 Q. Who is "them"? Are you talking about
- 16 subscribers or CSO?
- 17 A. CSO. The CSOs are the buyers, if
- 18 that's ever not clear, and different content
- 19 serves different needs in putting together a
- 20 bundle of programming for subscribers.
- Q. Does subscriber interest play any part
- in the reasons for why different types of
- 23 programming would be valued differently?
- 24 A. I mean, certainly the CSOs are trying
- 25 to attract, retain, maximize the willingness to

- 1 pay of subscribers. So, certainly, they are
- 2 aggregating the interest of subscribers, is a
- 3 big part of what they do. But ultimately that
- 4 means they determine the value that best serves
- 5 the diversified set of subscribers they're
- 6 trying to serve.
- 7 Q. And how are they -- what part of --
- 8 how are they measuring what the subscribers'
- 9 interests are in trying to put a diversified
- 10 programming together?
- 11 A. I mean -- so now we're again going
- into things that I know from lots of work I do
- in this industry. I mean, the calculations I
- 14 see them do are some combination of how does
- this content help me attract subscribers,
- 16 retain subscribers, or maximize what I can
- 17 charge subscribers.
- 18 So I've seen them do very economic
- 19 calculations that basically just say how much
- 20 more profitable will we be as a CSO if we carry
- 21 this content.
- Q. And how are they determining whether
- or not a subscriber would be attracted to the
- 24 programming they put together?
- 25 A. I mean, they do lots of things. They

- 1 do -- they look at when they've had blackouts
- and haven't had certain content, how many
- 3 people leave. They look at what -- you know,
- 4 what sort of prices they've been able to charge
- 5 in the marketplace when they have certain
- 6 content or not have certain content.
- 7 The calculations that I've seen them
- 8 do are very much driven by how much more money
- 9 can they make if they have this content than
- 10 not.
- 11 Q. Now, they don't care -- do they care
- if subscribers are watching the program or not?
- 13 A. I mean, care? As we said a minute
- 14 ago, they -- certainly the value that
- subscribers puts on different types of content
- 16 matter, but it's nothing close to a one-for-one
- 17 correlation with viewing. It's based on
- 18 attracting, retaining, and being able to charge
- 19 CSO subscribers, that viewing is one of, in my
- 20 experience, dozens of factors that they
- 21 consider.
- 22 Q. And what else beside viewing would
- 23 measure the attractiveness of a subscriber to
- 24 particular types of programming?
- 25 A. I mean, one example, there's many,

- 1 but, I mean, again, this is -- these guys do
- this for a living. But one example would be
- 3 when I have content, how many more subscribers
- 4 stay with my system and don't leave.
- 5 And another example would be when I
- 6 have certain content, can I put it on a tier of
- 7 programming on my CSO that becomes more
- 8 attractive so I can charge more for it? Those
- 9 things are -- you know, because they're trying
- 10 to put together diversified bundles and they're
- 11 trying to serve diversified subscribers, in my
- 12 experience, those things are quite distinct
- 13 from the number of people who watch the
- 14 program.
- 15 Q. Now, do you know whether CSOs research
- 16 whether or not subscribers that have left were
- 17 watching particular programming?
- 18 A. Again, in my experience, they study
- 19 primarily who leaves and who comes. Whether
- one variable they might look at in a model of
- 21 that along with many others might be who was
- 22 watching, it's possible. I really don't know.
- 23 JUDGE STRICKLER: When these bundles
- 24 are created, given your experience in working
- 25 with people in the industry, are the bundles

- also created as a form of -- or do they explore
- them as a form of price discrimination so that
- 3 they can increase the willingness to pay of
- 4 individuals who are already subscribing because
- 5 the bundle creates an ability to reveal a
- 6 higher willingness to pay? If that makes
- 7 sense.
- 8 THE WITNESS: Generally yes, or just
- 9 to -- I mean, I think the answer to that is
- 10 yes. They certainly put together, you know,
- 11 tiers of programming. So if they have more
- 12 programming, they might be able to put together
- some sports tiers or children's -- I mean, they
- 14 put together all sorts of different packages so
- 15 that they can sell those.
- 16 And I think you're right to say that
- 17 one function that plays is that they can better
- 18 price discriminate.
- 19 JUDGE STRICKLER: So you could add
- 20 program B and then sort of an agent allows you
- 21 to charge more for program A because A is now
- bundled with B, so the overall bundle is worth
- 23 more than the two individuals programs?
- 24 THE WITNESS: I think that's possible.
- 25 But I think it's also possible that you might

- 1 add program B and C, such that you can create
- 2 two tiers, one of which has A and one of which
- 3 has B and C, and better sort out your customers
- 4 in terms of what their preferences are.
- 5 JUDGE STRICKLER: Thank you.
- 6 BY MR. OLANIRAN:
- 7 Q. With regards to the programming
- 8 minutes, you basically treat all the minutes
- 9 the same; is that right? You don't make any
- distinction about the type of programming with
- 11 respect to the minutes; is that right?
- 12 A. I'm not sure I understand. I
- 13 certainly use minutes as the unit of
- observation, but I measure them by type of
- 15 content, so I have minutes in each type of
- 16 content and I measure the value of those
- 17 minutes separately for each type of content.
- 18 Q. What do you mean by you value for each
- 19 type of content? Are you talking about the
- 20 coefficient?
- 21 A. Yeah.
- O. Okay. But that's the only way in
- which you distinguish the minutes, correct?
- 24 A. I mean, I distinguish them, first of
- 25 all, by putting them in these buckets by what

- 1 type of content it is.
- Q. Okay.
- 3 A. So I don't treat the minutes the same.
- 4 I treat them as Program Supplier minutes or
- 5 Sports minutes or Commercial minutes. And
- then, yes, within each of those buckets, I let
- 7 that number of minutes have a different
- 8 coefficient to reflect its different value.
- 9 Q. You don't look, say, at time of day
- 10 that the program was on that's -- to determine
- 11 -- to put some form of valuation, to value that
- 12 particular time of day differently from the
- 13 remainder of the other minutes, right?
- 14 A. Yeah, that's correct. I treat the
- 15 minutes -- I don't distinguish by time of day.
- 16 Q. And you don't distinguish by
- 17 demographics either?
- 18 A. I mean, I don't measure the valuations
- 19 differently by demographic mix. I mean, that,
- 20 sort of what demographics the minutes attract
- is part of the valuation that the CSO puts on
- 22 the minutes.
- 23 So different demographic mixes
- 24 associated with different kinds of content are
- 25 one driver of the difference in the

- 1 coefficient, but beyond that, I don't do more.
- 2 Q. So within the syndicated programs
- 3 bundle, for example, my American Idol at 8:00
- 4 p.m. on a Wednesday night is valued the same as
- 5 Watching Paint Dry at 3:00 a.m. in the morning;
- is that a fair way to describe that?
- 7 A. I mean, I think I would say what I
- 8 report is an average across those two different
- 9 types.
- 10 Q. Anyhow, you conclude that -- you know,
- 11 your model confirms that sports programming is
- worth substantially more than other
- programming, all the other, I guess, five or
- 14 six categories of programming; is that right?
- 15 A. Yes.
- 16 Q. Okay. And that assertion is really
- 17 based on the value per minute that you
- 18 calculate for the -- for the sports
- 19 programming; is that right?
- 20 A. I would say it's a conclusion based on
- 21 all of the various studies put forward in my
- 22 reports. I mean, the regression determines a
- value per minute for categories. The cable
- 24 content analysis looks at what people pay for
- 25 it. But -- so I would say it's a conclusion

- 1 based on the empirical evidence we've been
- 2 talking about.
- 3 Q. Do you agree that WGNA was the most
- 4 highly retransmitted broadcast signal during
- 5 the 2010 through '13 period?
- 6 A. I think that's right.
- 7 Q. And it also has the largest subscriber
- 8 reach of any distant broadcast signal, correct?
- 9 A. I think that's right.
- 10 Q. And it's also attributed with most of
- 11 the -- most of the compulsory license fees that
- 12 are deposited for each year are attributable to
- 13 WGNA's; is that correct?
- 14 A. I don't know the exact percentages,
- 15 but that sounds right.
- 16 Q. Okay. And do you know the source of
- 17 the calculations for the fees generated?
- 18 A. No, I don't think I know explicitly.
- 19 I think I've seen some discussion of a fees gen
- 20 calculation, but that's not something that I've
- 21 studied.
- 22 Q. So you don't know who calculates it?
- 23 A. No, I don't.
- Q. Okay. Do you know whether it's --
- it's -- it's a calculation that's prescribed by

- 1 statute?
- 2 A. I just -- if we're talking about the
- 3 specific sort of fees gen variable I referred
- 4 to, I really don't know much -- anything about
- 5 it. It hasn't been something I've used in my
- 6 analysis.
- 7 Q. Okay. Does WGNA have, by itself, the
- 8 highest share of the compensable JSC
- 9 programming than any other distant signal?
- 10 A. Can you repeat that?
- 11 Q. Does WGNA have the highest share of
- 12 compensable programming in minutes for sports
- than any other distant signal?
- 14 A. You mean just total minutes it airs or
- 15 minutes times subscribers who view it or -- I
- 16 don't know. I mean, I know there's -- WGNA
- 17 goes to many, many systems and it airs a lot of
- 18 sports. So I know it's important to the
- 19 overall sports-watching.
- 20 Whether it's the most minutes as
- 21 minutes are measured in some way, I don't know.
- 22 Q. Minutes weighted by subscribers.
- 23 A. I think so.
- Q. Now, you've also testified that the
- 25 regression results corroborate the Bortz

- 1 results; is that right?
- 2 A. Yes.
- 3 Q. And, in fact, you describe your
- 4 regression results as compelling because they
- 5 yield extremely similar numbers to the Bortz
- 6 numbers for sports in particular. Do you
- 7 recall that?
- 8 A. Right. I found that compelling
- 9 evidence for the valuation on sports in
- 10 particular, yes. And then I go on to talk
- 11 about other similarities.
- 12 Q. You also said that the similarity of
- 13 your regression results and the Bortz results
- 14 are compelling economic evidence of proper
- 15 allocations of the top three categories. Is
- 16 that right?
- 17 A. Yes.
- 18 Q. And that the proper split between the
- 19 top three categories and the bottom three
- 20 categories, right?
- 21 A. Right. Those are the sort of ways in
- 22 which Bortz -- in which the regressions
- 23 corroborate Bortz that we talked about this
- 24 morning.
- 25 O. I'm curious, is there a survey

- 1 principle that supports the notion that your
- 2 regression results are corroborative of the
- 3 Bortz results simply because there's similarity
- 4 in the ranking order of the results?
- 5 A. I don't know if it's a survey
- 6 principle. I can say my -- you know, my work
- 7 in economics and econometrics, if you find two
- 8 very different methodologies that produce
- 9 similar rank -- similar valuation rankings, you
- 10 know, that, frankly, usually doesn't happen and
- is unlikely to happen by chance that you would
- 12 do six in a row in the right order.
- So I think if you think about what's
- the probability that would happen if it weren't
- 15 true, that's quite corroborative that the
- 16 survey is measuring the right thing.
- 17 O. And what two -- what two analyses are
- 18 you referring to, the Bortz survey and your
- 19 analysis or your analysis on Dr. Crawford's?
- 20 A. Here I was referring to Bortz and my
- 21 analysis.
- 22 Q. Okay. And -- but this is just by --
- there's no economic principle or statistical
- 24 principle that guides you in this particular
- 25 assertion?

- 1 A. I mean, sure, there's a statistical
- 2 principle, right? The statistical principle
- 3 would say if Bortz had the rankings wrong and
- 4 then I went and used another completely
- 5 independent method, what would be the
- 6 probability that just by chance that other
- 7 independent method would rank them from one to
- 8 six in the same order?
- 9 And think about drawing six
- 10 consecutive numbers like out of a hat. The
- odds that you would match the ranking would be
- 12 very low.
- So, statistically, the fact that the
- 14 rankings go in the same order is strong
- 15 evidence that that order -- that the survey
- 16 that generated that order was a valid survey.
- 17 MR. OLANIRAN: Perhaps you had a
- 18 question.
- JUDGE BARNETT: I want to know when
- 20 we're at a breaking point. How much more do
- 21 you have?
- 22 MR. OLANIRAN: I probably have another
- 23 20 minutes or so.
- JUDGE BARNETT: Okay.
- MR. OLANIRAN: Or so.

- 1 (Laughter.)
- JUDGE BARNETT: Do you want to ask
- your follow-up question and then we can take
- 4 our break?
- 5 BY MR. OLANIRAN:
- 6 Q. I just had one more question. Does it
- 7 matter -- strike that.
- 8 What if the ranking order in those two
- 9 analyses were 10, 11, 12 -- in one was 10, 11,
- 10 12, and the other one was 24 and 1? Would you
- 11 conclude that they are similar because the
- 12 ranking order is the same?
- 13 A. You mean what if the values underlying
- 14 them were --
- 15 Q. Yes. Were 10, 11, and 12, and 24 and
- 16 1?
- 17 A. Then I would look at the rank ordering
- 18 as one piece of evidence that was
- 19 corroborative, but in that case I would say
- 20 your top values are quite far apart. In my
- 21 experience, as I said before, something
- 22 regressions should do well is measure the value
- of kind of the most important categories.
- 24 O. So rank --
- 25 A. I would say the ranking was

- 1 consistent, but it certainly wouldn't match
- what I found here, which is that not only the
- 3 ranking but many of -- but the values at the
- 4 top and the split of value between the top and
- 5 the bottom are all consistent.
- 6 O. So mere ranking alone really does not
- 7 -- is not evidence of corroboration, is it?
- 8 A. It's one indicator.
- 9 MR. OLANIRAN: Okay. I can take a
- 10 break. Thank you.
- JUDGE BARNETT: We'll be at recess for
- 12 15 minutes.
- 13 (A recess was taken at 3:17 p.m.,
- after which the trial resumed at 3:36 p.m.)
- 15 JUDGE BARNETT: Please be seated. Mr.
- 16 Olaniran?
- 17 MR. OLANIRAN: Thank you, Your Honor.
- 18 BY MR. OLANIRAN:
- 19 Q. Dr. Israel, would you please turn to
- 20 page 22 of your testimony.
- 21 A. The initial -- my original testimony?
- 22 Q. Yes. Exhibit 1003.
- 23 A. Okay.
- Q. Are you there?
- 25 A. Yes.

- 1 Q. Okay. And let's look at Table 4-4 --
- 2 I'm sorry, V-4.
- 3 A. Okay.
- 4 Q. Are you there?
- 5 A. Yes.
- 6 Q. And this is a table that you rely on
- 7 for the proposition that your regression
- 8 results corroborate the Bortz results, correct?
- 9 A. Yeah, that's what I rely on it for,
- 10 that's correct.
- 11 Q. And that table shows the four years of
- the Bortz results, the four-year average and
- then your regression average, right?
- 14 A. Yes.
- 15 Q. Okay. And I think -- and it is the
- 16 four-year Bortz average that you compared to
- 17 your regression results that's in the last
- 18 column to establish that there is a
- 19 corroboration between your results and the
- 20 Bortz results; is that correct?
- 21 A. I mean, that's one thing that I
- 22 compare. The text also does some comparison of
- 23 the range of the Bortz results to my results
- 24 and some other comparisons.
- 25 Q. And you don't -- you didn't present a

- 1 year-by-year regression analysis for this
- proceeding, correct?
- 3 A. I didn't present results year-by-year.
- 4 As my report indicates, I did do a statistical
- 5 test to see if the coefficients were different
- 6 by year.
- 7 And the statistical tests found they
- 8 were not. There was no evidence that they were
- 9 different by year. So, therefore, I collapsed
- 10 them into a single average.
- 11 Q. When you say you did a test to see
- 12 whether the coefficients were different by
- 13 year, what do you mean by that?
- 14 A. So there is a thing in a regression
- 15 called an F test. But basically you ask
- 16 whether, if you let the regression be more
- 17 flexible, so that it had different
- 18 coefficients, different values per minute for
- 19 each year, you know, is there a statistical
- 20 support for that sort of variation.
- 21 And I did that statistical test and
- 22 didn't find support for that variation. So
- 23 that would indicate that, according to the
- 24 statistics, it's valid to collapse the results
- into a single combined average.

- 1 Q. Do you understand that the royalty
- 2 funds at issue in this case are separate funds
- 3 for each year?
- 4 A. Yes.
- 5 Q. And do you also understand that the
- 6 Claimants to each year's fund may not always be
- 7 the same from year-to-year?
- 8 A. I quess I didn't know that detail, but
- 9 I take your word for it.
- 10 Q. Okay. And so if they are
- 11 year-by-year, if there are significant
- 12 mismatches between your analysis and the Bortz
- 13 results, the way that you have presented your
- 14 analysis would mask those mismatches, would
- 15 they not?
- 16 A. I mean, no, I don't agree with that
- 17 because, as I said, there is no statistical
- 18 evidence for significant differences across the
- 19 years in my regression.
- 20 So I think doing that sort of
- 21 year-by-year comparison with my regression
- 22 would not make sense given that the regression
- 23 doesn't find statistically-significant
- 24 differences across years.
- Q. And so -- but, in fact, because your

- 1 regression is a three-year average, to the
- 2 extent those variations exist, when you match
- 3 -- if you had done a year-to-year and you had
- 4 done a head-to-head comparison with Bortz
- 5 versus your regression, but if there were
- 6 significant differences between the results,
- 7 notwithstanding, you know, the statistical
- 8 test, we would not know, would we, because you
- 9 didn't do a year-to-year?
- 10 A. I mean, you wouldn't see them here
- 11 but, again, that's because I don't want to show
- 12 results that aren't statistically meaningfully
- different by year and present that as a valid
- 14 year-by-year comparison.
- 15 Another way to say it is, given that
- 16 there is no statistically-significant
- 17 differences across the years of my regression,
- 18 the best way to present the results is to pool
- 19 them so that you get the benefit of the three
- 20 years combined.
- 21 Q. You are polling a three-year versus a
- 22 four-year, are you not?
- 23 A. It is true that I am comparing the
- three years versus a Bortz four-year number. I
- 25 mean, you can look at the numbers for 2013

- 1 relative to his average and see where that
- 2 would move the needle.
- 3 Q. And in your testimony you discuss how
- 4 your regression results fall within the minimum
- 5 and maximum ranges of the Bortz results for
- 6 Sports, Commercial Television, Public
- 7 Television, and Program Suppliers.
- 8 Do you recall that? I think it is in
- 9 paragraph 40 of page 21, I think, of your
- 10 testimony you said that.
- 11 A. Right. We discussed this earlier. I
- think I said it falls within the range for
- 13 Sports and for Commercial.
- 14 For Program Suppliers, it is just
- 15 below the bottom end of the range.
- 16 O. And I think you said Public Television
- 17 also, did you not?
- 18 A. I don't know. I mean, for Public
- 19 Television, my number is not within the range
- of the Bortz numbers. As we discussed, there
- 21 has been -- that provides some support for an
- 22 adjustment to the Bortz numbers, as we
- 23 discussed this morning.
- Q. But in paragraph 40 of your -- of your
- 25 testimony, you say that for the four highest

- 1 valued categories of programming, the 2012
- 2 results are in accord with the results of the
- 3 2010 Bortz survey on the -- on the rank order.
- 4 So you are not contesting that all
- four fall within; you are saying that they just
- 6 are in the same rank order. Is that right?
- 7 A. Correct. That first sentence is, as
- we have been saying, there is a rank order
- 9 comparison and then there is a comparison of
- the value particularly for the top categories.
- 11 That first sentence is about the ranks
- 12 and then I go on to the value comparison.
- 13 Q. Now, did you do an apples-to-apples
- 14 comparison to determine where your regression
- 15 -- where your regression values fall within the
- 16 2010-2012 Bortz result ranges?
- 17 A. I don't know what you mean by an
- 18 apples-to-apples.
- 19 Q. Did you do a Bortz average from 2010
- 20 to 2012 versus your average from 2010 to 2012?
- 21 A. I haven't done that particularly. I
- 22 talked about the evidence that I looked at from
- 23 Crawford and Bortz to indicate 2013 wouldn't
- 24 move the needle materially, but I have not
- 25 explicitly laid out the same years.

- 1 As I mentioned earlier, I was trying
- to corroborate, so I looked at the full Bortz
- data versus my full data. But I have not done
- 4 the just 2010 through 2012 on Bortz.
- 5 Q. Can you please put up the next slide,
- 6 please.
- 7 Dr. Israel, I have a demonstrative
- 8 exhibit that I wanted you to take a look at.
- 9 And the exhibit has -- the first column has the
- 10 list of the different program categories. And
- 11 then it has the Bortz results for three years.
- 12 The next column after that is the
- 13 2010-'12 Bortz average for those three years.
- 14 And then the next column is your 2010 through
- 15 '12 regression.
- 16 And then following that is the
- 17 question whether or not if your regression
- 18 falls within the Bortz minimum/maximum
- 19 estimates.
- 20 Have you taken a minute to look at
- 21 that?
- 22 A. I see it, yes.
- Q. And, I mean, the column labeled D is
- 24 actually a calculated column. If you need to
- 25 check the math on that, there's a calculator

- 1 next to you.
- 2 A. I will take your word for it.
- 3 Q. Okay. I don't know.
- 4 A. I will take the word of whoever did
- 5 the calculation.
- 6 Q. Yeah, subject to -- subject to check.
- 7 And so when you adjust for apples-to-apples
- 8 with three-year averages, so with respect to
- 9 your regression results for the Sports program,
- 10 do they fall within the minimum/maximum range?
- 11 Does it -- does your regression average fall
- within the minimum/maximum range for Sports?
- 13 A. Yes.
- 14 Q. And what about for Program Suppliers?
- 15 A. No, it is slightly below the bottom
- 16 end as it was in my previous comparison.
- 17 Q. And what about for Commercial
- 18 Television?
- 19 A. Yes.
- 20 Q. And what about Public Television?
- 21 A. No, it is higher, as we discussed.
- 22 Q. And for Devotional and Canadian
- 23 Claimants, they are not in the range at all,
- 24 are they?
- 25 A. Right, because it gives you the zero

- 1 value, as we've discussed. I would notice that
- that pattern of yes's and no's is exactly what
- 3 it was when I did my 2010 to 2013 comparison.
- 4 Q. And with regard to -- we can close
- 5 that screen.
- 6 In your regression analysis, the
- 7 coefficient is the price, if you will, is it
- 8 not, and if you think in terms of -- and
- 9 correct me if I am wrong, this is how I think
- 10 about it -- in terms of market value, you are
- 11 looking at some type of price and then you are
- 12 looking at some type of quantity. Is that
- 13 right?
- 14 A. I mean, as we discussed, the price is
- 15 coming out of the regulations. So I think the
- 16 coefficient is correctly thought of as a
- 17 measure of the buyer's side value on the
- 18 content.
- 19 Q. But -- I'm sorry.
- 20 A. Go ahead.
- Q. So what do you mean by the price is
- 22 coming out of regulation? What price are you
- 23 referring to? The coefficient?
- A. No, I mean the -- the regression is
- 25 based on buyers choosing programming, given a

- 1 fee schedule which is set by the statute. And
- 2 so the price that the buyer has to pay for more
- 3 content is whatever the fee schedule says.
- 4 And the regression then looks at
- 5 choices made given that fee schedule to
- 6 determine the values that the buyer puts on the
- 7 content.
- 8 So I think it is very similar to
- 9 something that in industrial organization is
- 10 called a hedonic regression. But it is
- 11 basically measuring the value that buyers put
- 12 on different product characteristics as a
- 13 function of what they have to pay for them.
- 14 Q. What is a function of that value in a
- marketplace where royalty payments don't exist?
- 16 A. I mean, as I have discussed, the way
- 17 the market -- in every setting where there is a
- 18 free market between a CSO and a network
- 19 provider, that I know of, those prices get set
- 20 by negotiation between the network and the CSO.
- 21 And economics teaches us that the
- value that will be arrived at in those
- 23 negotiations is basically some fraction, often
- assumed to be 50/50, but it is not
- 25 insignificant, it is some fraction of the

- 1 buyer's willingness to pay.
- 2 And so the function of those buyer
- 3 values is that they set the value or what
- 4 economists call the surplus that is being
- 5 negotiated over when the network and the CSO
- 6 negotiate to arrive at a price.
- 7 Q. But the royalty payments that you've
- 8 used don't exist in that market, in the
- 9 hypothetical market. Once regulation is gone,
- 10 so are the royalty payments, correct?
- 11 A. Correct, but the values are the
- buyer's actual values and those are what drive
- 13 the negotiation to determine the price.
- 14 Q. I mean, what -- if royalty payments
- didn't exist, you don't have any other evidence
- of what the value would be, other than the
- 17 cable content analysis, correct?
- 18 A. No. The evidence of the value is
- 19 based on the choices that buyers make. I mean,
- 20 as I have said, it is very common in economics
- to have regulated prices and to learn from the
- 22 decisions that buyers make given those
- 23 regulated prices.
- 24 So that the information -- I am not
- assuming the price schedule stays the same.

- 1 I'm assuming that the values that I derive from
- 2 the choices that buyers make given that price
- 3 schedule are still the relative -- relevant
- 4 values to determine the prices in the free
- 5 market.
- 6 O. But those values are not based on the
- 7 free market, are they?
- 8 A. They are based on the choices that the
- 9 buyers make, given the price schedule. What
- you want to do is measure the buyer's values.
- So given a price schedule, whether it
- 12 be regulated or determined from a market, if
- 13 you see the choices that buyers make given
- 14 those prices, you could determine what the
- 15 buyers value.
- 16 O. On those choices within the regulated
- 17 market?
- 18 A. They are choices -- buyers face a
- 19 price schedule and they make choices. It is
- 20 very common in economics.
- In fact, it has been done in a fair
- 22 bit of my own research, where you take choices
- that are made in one regulatory setting, you
- use those choices to infer what -- the value
- 25 the buyers must put on the product, and then

- 1 you use those values to determine what would
- 2 happen in a different market.
- 3 Q. You haven't answered my question. Are
- 4 those choices the choices that your modeling
- 5 made in the regulated market or not? Yes or
- 6 no.
- 7 A. They are made with regulated prices
- 8 but that doesn't change the analysis.
- 9 Q. Well, is that a yes or a no?
- 10 A. They are made -- your question was are
- 11 they made in a regulated price setting?
- 12 Q. The choices that you have modeled, are
- they not made in a regulated -- in a regulated
- 14 environment?
- 15 A. They are made in a regulated
- 16 environment, against a regulated price control.
- 17 O. And I wanted to -- I know earlier when
- 18 you were talking to -- when you were being
- 19 examined by Mr. MacLean, he mentioned
- 20 comparisons within Dr. Crawford's results and
- your results, but he used figure 16, I think,
- in Dr. Crawford's results.
- 23 And so if you look on the screen,
- 24 there is another demonstrative exhibit that
- 25 took the results right out of yours and Dr. --

- 1 the results of your coefficients, and
- 2 Dr. Crawford's testimony, figure 19, I believe,
- and your -- and your regression coefficients,
- 4 which I think is on page 22 -- 52.
- And, again, not to belabor the point,
- 6 Dr. Crawford's result, I believe, is when he
- 7 uses the non-duplicated minutes. So in making
- 8 that -- this comparison, for live team sports,
- 9 Dr. Crawford has, as you can see .963, and you
- 10 have, again, 4.836.
- 11 Would you consider this a significant
- 12 difference in coefficient results?
- 13 A. I mean, again, as I said, the numbers
- 14 are quite different, but you can't compare --
- 15 given the difference in the functional forms,
- 16 the log and the linear and what is controlled
- 17 for in the regressions, you can't -- there is
- 18 no meaning to just comparing those two numbers.
- 19 Q. So are you answering my question with
- 20 a yes or a no? Is this a significant
- 21 difference?
- 22 A. I honestly --
- MR. LAANE: I object. The question
- 24 can't fairly be answered with a simple yes or
- 25 no.

- 1 JUDGE BARNETT: Sustained.
- 2 BY MR. OLANIRAN:
- 3 Q. With respect to -- with respect to
- 4 live team sports, looking at Dr. Crawford's
- 5 regression, is there significant mathematical
- 6 difference between the two numbers?
- 7 A. I mean, I don't know. Significant to
- 8 me would mean is there a statistical
- 9 difference.
- 10 Q. I am not asking about a statistical
- 11 difference.
- 12 A. That's what the word significant means
- 13 to me. But if you mean is there a large --
- 14 there is a -- I don't know how to answer that.
- 15 The numbers are clearly different. They are
- 16 not economically comparable. So I don't know
- 17 how to interpret the size of that difference.
- 18 O. Actually I said is this a significant
- 19 mathematical difference, not in the statistical
- 20 sense.
- 21 A. I mean, they are different. I don't
- 22 know how to say if it is significant if I don't
- 23 know how to interpret the numbers.
- O. Well, there is -- there is a
- 25 difference of probably about close to \$3, about

- 3 plus dollars; is that correct?
- 2 A. Yes, there is a difference of that
- 3 amount.
- 4 Q. And then for Program Suppliers,
- 5 Dr. Crawford has Program Suppliers at .069.
- 6 And in your regression, you have Program
- 7 Suppliers at .469, your coefficient of Program
- 8 Suppliers at .469. Right?
- 9 A. Right. Again, I have to stress those
- 10 are measuring different things. One is the
- 11 marginal minute in a logarithmic regression.
- 12 One is the linear average as we discussed
- earlier but, yes, that's the difference between
- 14 the numbers.
- 15 O. So you are saying there is a
- 16 difference between your coefficient results and
- 17 Dr. Crawford's?
- 18 A. Because there is such a -- there is a
- 19 difference in the whole regression
- 20 specification, then there is going to be a
- 21 difference in the coefficients. And you really
- 22 need to go to the shares to measure the
- 23 comparison.
- Q. Well, let me make sure I understand
- 25 this then. The regression -- the coefficients

- of the results of the regression analysis are
- 2 for each of you; is that correct?
- 3 A. Yes, but they mean something different
- 4 in the two regressions.
- 5 Q. I understand. I understand what you
- 6 are saying. But the minutes that you use are
- 7 not part of the regression; is that right?
- 8 A. I mean, they are data in the
- 9 regression. They are not part of the
- 10 regression output.
- 11 O. The values that are in this
- 12 demonstrative are the values that you apply to
- the minutes to get an implied share?
- 14 A. They certainly are from my column.
- 15 Because mine is linear. So you can multiply
- 16 the coefficient times the minutes and get the
- 17 implied share.
- Dr. Crawford has a logarithmic form,
- 19 which means the coefficient, you can't just
- 20 multiply it times the minutes. You need to
- 21 account for the non-linear form he is using.
- Q. So basically in terms of the
- 23 corroboration that you speak to with regard to
- your results and Dr. Crawford's results, you
- 25 are really referring to just implied share,

- 1 correct?
- 2 A. That's correct.
- 3 Q. And the implied shares include the
- 4 minutes which are not part of the regression
- 5 results at all; is that correct?
- 6 A. They are not part of the regression
- 7 results, I agree with that.
- 8 Q. Dr. Israel, you said that you prepared
- 9 your regression analysis for 2010 and 2012
- 10 sometime before the Judges issued an order
- 11 consolidating the 2013 cable royalty year with
- 12 2010 and 2012. Do you recall that?
- 13 A. I mean, certainly acquired the data
- 14 for the earlier years and had begun doing the
- 15 work. I don't remember the timing of when the
- 16 order came out. But what I'm certain of is we
- 17 had already acquired the data for 2010 to 2012
- when 2013 was added.
- 19 Q. And why, again, did you not do a
- 20 regression for 2013?
- 21 A. Because I saw the purpose as to
- corroborate to see if the Bortz survey results
- are matching what's going on in the
- 24 marketplace. And in my view, having a
- 25 three-year comparison provides a good

- 1 experiment to do that corroboration.
- Q. And you didn't think it was important
- 3 to do a 2013? Did you seek to do it at all?
- 4 A. No, I mean, I -- again, the question
- from my point of view, the assignment I had
- 6 been given was take the Bortz survey results,
- 7 see if they are consistent with marketplace
- 8 evidence.
- And, you know, if they are consistent
- 10 for three years, that's a very strong
- 11 corroboration of a survey. So I didn't -- I
- 12 had a very nice experiment based on the first
- three years to answer the question I had been
- 14 asked to answer.
- 15 O. And the statistics test that you
- 16 mentioned that you did, was that a statistical
- 17 test with regard to your comparison of your
- 18 results in Bortz or your results in
- 19 Dr. Crawford's?
- 20 A. I mean, the statistical test -- I am
- 21 not sure which statistical test you mean.
- 22 O. You mentioned a statistical test to
- 23 see whether or not doing another year's
- 24 regression would have made a difference.
- 25 A. The test I actually meant was within

- 1 my own regression to see if 2010, 2011, and
- 2 2012 were different from each other. And they
- 3 weren't. So I reported the average.
- 4 The -- the test I did to look at 2013
- 5 was really just comparing the coefficient --
- 6 the shares that I got versus what Crawford got
- 7 when he added '13 versus what Bortz had in
- 8 2013. And those shares were -- were quite
- 9 similar.
- 10 Crawford 2013 matches Bortz 2013 as
- 11 well as the earlier years. Crawford 2013
- 12 matches my earlier years quite well. And so
- 13 that just -- it was one more piece of evidence
- 14 that adding 2013 hadn't changed the story in
- 15 any material way.
- But, again, my key, what you can take
- away from my regression which is on 2010 to
- 18 2012, is that marketplace evidence from those
- 19 three years corroborates what is in Bortz.
- 20 O. And in general, if you had all of the
- 21 data that you needed, the computer to construct
- 22 a regression model, how long would it take you
- 23 to do that, if you had all the data?
- 24 A. If I started with all the data? What
- 25 am I being asked to do, just add another year?

- 1 Q. Yes.
- 2 A. If I already had all the data, then
- 3 running the regression would be -- you would
- 4 have to clean it and check it, but running the
- 5 regression would be reasonably quick.
- 6 Q. What's quick, a day, two days?
- 7 A. I don't know. More like weeks
- 8 probably by the time you check the data and
- 9 everything. But certainly a week, two weeks,
- 10 something like that, once you have all the
- 11 data, which is -- and clean it. That's a big
- 12 part of the process.
- 13 Q. Okay. You said you didn't recall when
- 14 the Judges ordered consolidation of 2010
- through '12 and 2013; is that right?
- 16 A. That's right.
- 17 Q. Let me represent to you that the
- 18 Judges issued an order on September 9 of 2015.
- 19 All right?
- 20 A. Okay.
- Q. When did you submit your testimony?
- 22 A. The date is on it. I think it was
- 23 late 2016.
- O. That would be December of 2016; is
- 25 that correct?

- 1 A. Yes.
- 2 Q. So between September 2015 and December
- 3 2016, you didn't think it was important to do a
- 4 regression analysis for 2013?
- 5 A. I mean, again, my answer is going to
- 6 be the same. I thought the three-year test, if
- you compare three years of market data to three
- 8 years from a survey, you have a nice
- 9 experiment.
- 10 And so I concluded I had met the
- 11 assignment I had been given, which was to see
- if the Bortz results were corroborated by
- 13 marketplace evidence.
- 14 It was marketplace evidence from 2010
- to 2012. And then later results came out from
- 16 2013 from Crawford, which provide one more
- 17 piece of evidence.
- 18 But my decision was based on the fact
- 19 that I could give an affirmative corroboration
- answer based on a three-year experiment.
- Q. And did anyone ask you to do the 2013
- 22 analysis at all?
- 23 A. No.
- Q. I'm sorry?
- 25 A. I said no. I didn't know if you

- 1 didn't hear me.
- Q. No one cared whether or not you did
- 3 the 2013 analysis?
- 4 MR. LAANE: Objection, argumentative.
- JUDGE BARNETT: Sustained.
- 6 BY MR. OLANIRAN:
- 7 Q. On page 9 of your testimony, you quote
- 8 language from the CARP's '90-'92 determination
- 9 allocating royalties among various Claimants
- 10 for the '90-'92 royalty years.
- 11 Do you recall that?
- 12 A. Yes.
- 13 O. And you should have somewhere
- 14 thereabouts where you sit a black binder with a
- 15 green cover. Do you have that? It might be
- 16 behind you, I think.
- 17 A. Yeah. There is a few of them. I hope
- 18 I get the right one. Okay.
- 19 Q. Would you please look at the
- 20 exhibit marked as Exhibit 6034.
- 21 A. 604?
- 22 Q. 6034.
- 23 A. I see it.
- Q. And is that the report that you quote
- on page 9 of your testimony?

- 1 A. Let me just confirm.
- Q. Well, you can go to, I think, page 65,
- 3 I think, of that report and compare it to the
- 4 quote you have on page 9 of your testimony.
- 5 A. Yep, I see it.
- 6 Q. And that's the quote that you have in
- your testimony on page 9; is that correct?
- 8 A. It looks like it, yes.
- 9 Q. Okay. And so is this the report that
- 10 you relied on in -- as part of your testimony,
- 11 right?
- 12 A. I certainly reviewed it and certainly
- 13 relied on this conclusion about the Bortz
- 14 survey. I don't, as I sit here, remember every
- page of it. But, yes, certainly I relied on it
- 16 for purposes of its conclusions about the Bortz
- 17 survey.
- 18 Q. Okay. And this is just, for the
- 19 record, this is the cover letter to that report
- 20 that's dated May 31st, 1996. And it is -- the
- 21 subject line is Covering Arbitration Royalty
- 22 Panel, Cable Royalties For the Years 1990
- 23 through 1992. Right?
- 24 A. That's what it says, yes.
- 25 Q. Okay.

- 1 MR. OLANIRAN: Your Honor, move to
- 2 admit Exhibit 6034.
- JUDGE BARNETT: 6034 is admitted.
- 4 (Exhibit Number 6034 was marked and
- 5 received into evidence.)
- 6 BY MR. OLANIRAN:
- 7 Q. Now, you spoke earlier about viewing,
- 8 in response to many of the questions that you
- 9 said that CSOs don't care about viewing. Is
- 10 that right?
- 11 A. No, I don't think I said that. I
- 12 think I said they ultimately care about the
- 13 effect of additional content on their
- 14 profitability, of which viewing is one of many
- 15 factors.
- 16 Q. But you didn't think viewing was a
- 17 component of value, did you? You don't think
- 18 viewing is a component of value?
- 19 A. I mean, again, I think viewing -- the
- 20 extent of viewership is one characteristic of
- 21 content. I'm not saying it is entirely
- 22 irrelevant. I am just saying it is not the
- 23 same thing as value and there is many other
- 24 relevant factors.
- 25 Q. Are you aware of -- do you know

- whether or not this report speaks to whether or
- 2 not viewing is part of value?
- 3 A. I don't recall as I sit here. I think
- I recall in previous statements people saying,
- 5 you know, in general reports saying viewing was
- one component of value, as I -- as I have said,
- 7 but I don't recall the specific language in
- 8 this report, or in this finding.
- 9 Q. Let me -- would you please turn to
- page 44 of that report, of Exhibit 6034.
- 11 A. 44?
- 12 Q. Yes. Are you there?
- 13 A. Yes.
- 14 Q. And let me direct your attention to
- the fourth line in the carry-over paragraph, do
- 16 you see that, the second -- the third full
- 17 sentence? It is on the fourth line. Do you
- 18 see that?
- 19 A. Yes.
- 20 Q. Would you please read that into the
- 21 record through the end of that paragraph?
- 22 A. Sorry. Where do you want me to start?
- Q. "It is," do you see that?
- 24 A. "It is disingenuous"? There?
- 25 O. Yes.

- 1 A. I can read it. "It is disingenuous to
- 2 say that the cable system is interested only in
- 3 attracting subscribers but is totally
- 4 unconcerned with whether or not the subscriber,
- 5 in fact, watches the programming. As was
- 6 stated by Sieber, who testified for the Program
- 7 Suppliers, cable system operators are more
- 8 willing to carry the more heavily watched,
- 9 higher rated services. Cable system operators
- 10 receive Nielsen data in a variety of ways."
- 11 Q. Let me also direct you to the last
- 12 paragraph on that page. It is the one that
- 13 starts with "in conclusion."
- 14 A. Yes.
- 15 Q. Would you please read that into the
- 16 record?
- 17 A. Sure. "In conclusion, we accept the
- 18 Nielsen data for what it purports to be, a
- 19 survey of actual conduct with adequate accuracy
- 20 for the larger Claimant groups in particular.
- 21 We cannot quantify the Nielsen statistics as
- 22 evidence of market value other than to say that
- 23 actual viewing is very significant when weighed
- 24 with all other factors."
- 25 Q. Okay. Now, the language you just read

- 1 is inconsistent with your testimony this
- 2 afternoon, is it not?
- 3 A. I think it is completely consistent
- 4 with my testimony. Consistent.
- 5 My testimony is that viewing is one
- 6 characteristic of programming, I don't say it
- 7 is irrelevant, but it is one of many factors.
- 8 I think that's what this says.
- 9 MR. OLANIRAN: I have no further
- 10 questions, Your Honor. Thank you.
- JUDGE BARNETT: Thank you, Mr.
- 12 Olaniran. Anything from Commercial Television?
- MR. STEWART: No, Your Honor.
- MR. LAANE: One very brief follow-up,
- 15 Your Honor.
- 16 REDIRECT EXAMINATION
- 17 BY MR. LAANE:
- 18 Q. If you go back, Dr. Israel, to
- 19 Exhibit 6034 and page 65 that you were asked
- 20 about?
- 21 A. Remind me of the page again.
- 22 Q. 65.
- 23 A. Yep.
- Q. At the very bottom of that page, did
- 25 the Panel indicate that the Bortz survey was

- 1 focused more directly than any other evidence
- 2 to the issue presented, relative market value?
- A. That's what it says, yes.
- 4 MR. LAANE: Nothing further.
- 5 JUDGE BARNETT: Is Mr. Hartman
- 6 available?
- 7 MR. LAANE: He is, Your Honor.
- 8 JUDGE BARNETT: Then let's get
- 9 started.
- 10 (The witness stood down.)
- JUDGE BARNETT: Thank you, Dr. Israel.
- 12 Sorry.
- 13 THE WITNESS: Thank you.
- JUDGE BARNETT: Thank you.
- 15 Please be careful finding your way to
- 16 the chair.
- 17 MR. HARTMAN: Yes, I will not trip on
- 18 anything.
- 19 JUDGE BARNETT: If you would, please,
- 20 raise your right hand.
- 21 THE WITNESS: Sure.
- 22 Whereupon--
- 23 DANIEL HARTMAN,
- 24 having been first duly sworn, was examined and
- 25 testified as follows:

- 1 JUDGE BARNETT: Please be seated.
- 2 MR. CANTOR: Good afternoon, Your
- 3 Honors. Dan Cantor of Arnold & Porter for the
- 4 JSC.
- 5 DIRECT EXAMINATION
- 6 BY MR. CANTOR:
- 7 Q. Good afternoon, Mr. Hartman.
- 8 A. Good afternoon.
- 9 Q. Would you please introduce yourself
- 10 for the Court.
- 11 A. Yes. My name is Dan Hartman.
- 12 Q. Would you please just give us a brief
- 13 background, overview, of your professional
- 14 background?
- 15 A. Sure. I have been in the television
- and media business for 20 plus years,
- 17 negotiating for content, kind of
- 18 valuing/acquiring that content.
- 19 I currently serve as president of
- 20 Hartman Media Services, a consulting company.
- 21 So I provide consulting services to
- various media clients, including content owners
- 23 like cable channels, content distributors like
- 24 satellite cable, new entrants to the market,
- 25 and I do a -- I do a lot of work with financial

- 1 institutions kind of giving advice, strategy,
- 2 background on just the -- this is in general,
- 3 whether it is the cable distributors or the
- 4 networks themselves, content companies.
- 5 Q. Now, where did you work before Hartman
- 6 Media?
- 7 A. Prior to that I was at DirecTV for 15
- 8 years. I spent the last seven of that as
- 9 Senior Vice President of Programming
- 10 Acquisitions.
- 11 So in that role I was basically
- 12 responsible for acquiring all the content that
- 13 you see on the -- on your channel guide, so
- 14 general entertainment networks, sports
- 15 networks, ESPN, kind of out-of-market sports
- 16 packages like your NBA League Pass, pay TV
- 17 channels like HBO, and also during that period
- 18 the group that negotiated the local station
- 19 carriage and the distant signals reported into
- 20 me as well.
- 21 JUDGE BARNETT: Could you put the
- 22 microphone closer?
- THE WITNESS: Oh, sure.
- 24 BY MR. CANTOR:
- Q. And I believe you said you negotiated

- 1 terms of carriage when you were at DirecTV. Is
- 2 that correct?
- 3 A. Yes.
- 4 Q. Do you have just a rough estimate of
- 5 about how many terms of carriage you may have
- 6 negotiated while you were at DirecTV?
- 7 A. Yeah. It would have been in the
- 8 hundreds, I'm sure.
- 9 Q. And where did you work before DirecTV?
- 10 A. Prior to that I was at Fox
- 11 Broadcasting Company. So I -- and there I
- 12 basically just served as in-house legal counsel
- for the broadcast network. Mostly I was the
- 14 attorney for the Fox Sports Group.
- 15 O. Do cable and satellite distributors
- 16 compete for the same customers?
- 17 A. Yeah, they do. The business model is
- 18 basically, I would say, the same. You are
- 19 getting revenue from the customers coming in.
- 20 And that's kind of the lifeblood of your
- 21 business.
- The -- you know, we compete, I would
- 23 say, on programming, pricing, packaging. When
- I was at DirecTV certainly cable was the -- by
- 25 far the biggest competitor we had.

- 1 MR. CANTOR: Your Honors, the JSC
- offer Mr. Hartman as an expert in the valuation
- 3 of television programming by multi-channel
- 4 video program distributors.
- 5 MS. PLOVNICK: Voir dire, Your Honor?
- JUDGE BARNETT: Yes.
- 7 VOIR DIRE EXAMINATION
- 8 BY MS. PLOVNICK:
- 9 Q. Good afternoon, Mr. Hartman.
- 10 A. Good afternoon.
- 11 Q. My name is Lucy Plovnick. I represent
- 12 the Program Suppliers.
- 13 Have you ever worked for a cable
- 14 operator?
- 15 A. I have not worked for a cable
- 16 operator. Like I said, I think the business
- models are the same.
- 18 Q. And your experience is at DirecTV,
- which is a satellite carrier; is that correct?
- 20 A. It is a satellite carrier, correct.
- MS. PLOVNICK: Your Honor, we would
- 22 object to the proffer as overly broad. I guess
- 23 I can ask one more question.
- 24 BY MS. PLOVNICK:
- 25 Q. Would you define MVPD as including

- 1 both cable and satellite carriers?
- 2 A. Yes.
- MS. PLOVNICK: Your Honor, JSC has
- 4 offered him as an expert in this MVPD
- 5 decision-making, but that includes cable
- 6 operators, not just satellite carriers. And
- 7 his experience is limited to satellite.
- 8 So we would object as an overly broad
- 9 offer of his experience.
- 10 JUDGE BARNETT: Mr. Cantor, would you
- 11 like to inquire further or respond?
- MR. CANTOR: If I may, Your Honor, I
- will both inquire further and then respond.
- 14 JUDGE BARNETT: Okay.
- 15 DIRECT EXAMINATION Resumed
- 16 BY MR. CANTOR:
- 17 Q. Mr. Hartman, when you were at DirecTV,
- 18 did the programming that you were negotiating
- 19 for, was that the same type of programming that
- 20 cable operators negotiated for?
- 21 A. Yes, it was the same. And, in fact,
- 22 the contract terms would be pretty much the
- 23 same and, you know, rates, all the -- all the
- 24 terms, I quess, we would negotiate for I think
- 25 would be the same as a cable company would

- 1 negotiate for.
- 2 Q. And when you were at DirecTV, did
- 3 DirecTV carry WG -- distantly carry WGNA?
- 4 A. Yes, it did.
- 5 MR. CANTOR: Your Honor, if I may
- 6 respond to Ms. Plovnick?
- 7 JUDGE BARNETT: Yes.
- 8 MR. CANTOR: Mr. Hartman is a highly
- 9 qualified expert in the field of -- in the
- industry of multi-platform -- multi-channel
- 11 video distributors.
- He is someone who has negotiated
- hundreds of agreements for content, and it is
- an industry that is not just limited to cable,
- but includes both satellite distributors as
- 16 well as telecom distributors as well.
- 17 So this is someone square right in the
- 18 middle of the very industry that we're talking
- 19 about in this proceeding.
- 20 MS. PLOVNICK: Your Honor, we don't
- 21 have an objection to Mr. Hartman testifying
- 22 based on his experience as a satellite carrier,
- 23 but he is not a cable operator.
- So we think the proffer should be
- 25 limited to qualify him as a satellite carrier

1	expert.
2	MR. CANTOR: And if I may respond to
3	that as well. I think this is just an area
4	that is proper for cross-examination, that if
5	others disagree with his qualifications to
6	comment about the main competitors in the cable
7	industry, that that's something that can be
8	brought out on cross.
9	But this is someone who is, again,
10	square right in the middle of this industry,
11	and been involved with cable and satellite.
12	JUDGE BARNETT: Mr. MacLean?
13	MR. MacLEAN: Your Honor, the SDC also
14	has an objection to the qualifications of this
15	expert.
16	And we, although we do believe that a
17	foundation has been laid for an expert in
18	something, we would object to his qualification
19	as an expert in valuation absent any foundation
20	for any experience in appraisal or other
21	valuation techniques.
22	We put an objection on that basis to
23	his expertise as in that way.
24	JUDGE BARNETT: Thank you. Do you

want to respond to Mr. MacLean, Mr. Cantor?

1	MR. CANTOR: Sure. As you have heard
2	from Mr. Hartman, Your Honor, this is an expert
3	who has negotiated for all types of content
4	that are at issue in this proceeding, for
5	sports, for general entertainment, for
6	Devotional.
7	And as he has already said and as you
8	will also hear further in his testimony, he is
9	someone who had to decide whether to carry it
10	and what to pay for it, which goes to the very
11	heart of valuation of the programming.
12	JUDGE BARNETT: Now, would you state,
13	again, the areas in which you are asking that
14	he be qualified?
15	MR. CANTOR: Sure. We are asking that
16	he be qualified as an expert in the valuation
17	of television programming by multi-channel
18	video program distributors, and, if it's
19	helpful, I can ask him to define that for you.
20	JUDGE BARNETT: I'm going to consult
21	with my colleagues on this. It will just be a
22	few minutes.
23	(Judges confer outside the hearing room.)
24	JUDGE BARNETT: Please be seated.
25	MR. CANTOR: Your Honor, if I may, I

was hoping I could make just one more point on 1 2 this issue. 3 JUDGE BARNETT: You may. MR. CANTOR: What we're talking about here is in -- satellite and cable are two 5 6 different just technologies competing for the same customers with the same product. just the only difference that we're dealing with is a difference in the transmission 9 10 technology. So it is just one more reason why this 11 witness is fully qualified to be an expert 12 13 here. Ms. Plovnick? 14 JUDGE BARNETT: 15 MS. PLOVNICK: Your Honor, we have a separate satellite proceeding here. 16 17 actually moved to consolidate cable and 18 satellite and the Judges did not grant our motion as to Phase 1. 19 20 So this is not -- cable and satellite are not consolidated and so we would object. 2.1 JUDGE BARNETT: Okay. An expert --22 23 I'm sorry I don't have the rule in front of me and I can't quote the language precisely, but 24

the Judges may qualify an expert based on

- 1 either education, training, or experience.
- 2 Clearly Mr. Hartman has experience in
- 3 this industry and has direct experience in
- 4 negotiating programming carriage, station
- 5 programming, or station carriage, I believe is
- 6 his actual words.
- 7 And as to the difference between
- 8 satellite and cable, we believe that goes to
- 9 the weight of his testimony rather than to the
- 10 admissibility.
- 11 And for that reason Mr. Hartman is
- 12 qualified as an expert in valuation of
- television programming in multi-channel video
- 14 distribution. Did I say all those words right?
- 15 MR. CANTOR: Correct.
- 16 JUDGE BARNETT: Okay. You may
- 17 proceed, Mr. Cantor.
- 18 MR. CANTOR: Thank you, Your Honor.
- 19 BY MR. CANTOR:
- Q. Mr. Hartman, have you been retained as
- an expert in this proceeding by the JSC?
- 22 A. Yes, I have.
- Q. What was your assignment?
- 24 A. It was basically to provide, I quess,
- 25 use my experience as an MVPD executive to offer

- 1 my opinion as to the valuation of different
- 2 types of television programming.
- 3 Q. So you should have on the witness
- 4 stand there a binder with exhibits marked 1010
- 5 and 1011. Let's start with 1010 first, please.
- 6 Would you please tell us what 1010 is?
- 7 A. Yes. That's a copy of my written
- 8 direct testimony submitted in this proceeding.
- 9 Q. And what is Exhibit 1011?
- 10 A. That is a copy of my written rebuttal
- 11 testimony submitted in this proceeding.
- 12 Q. And did you prepare both Exhibits 1010
- 13 and 1011?
- 14 A. Yes, I did.
- 15 Q. Do you declare that Exhibit 1010, your
- written direct testimony, is true and correct
- 17 and of your personal knowledge?
- 18 A. Yes, I do.
- 19 Q. Do you have any corrections that you
- 20 would like to offer regarding Exhibit 1011,
- 21 your written rebuttal testimony?
- 22 A. Yes. There is one correction on page
- 23 6, I believe, which is Table -- Table III.1, so
- 24 there it's just a listing of the -- of the
- 25 Major League Baseball telecasts on WGNA.

- So for the year 2010, the White Sox
- 2 number should read 32 versus 33. So the total
- 3 there would reflect a 116 number versus a 117
- 4 number.
- 5 Q. I was going to ask, Geoff, if you
- 6 could please put Table III-1 up on the screen.
- 7 And if you could just repeat what you
- 8 were just saying, now that it is up on the
- 9 screen, if you could repeat what you were
- 10 saying for the Judges.
- 11 A. Oh, sure. Sure. So the only change
- to this table is the number of White Sox games
- in 2010 should be 32 versus 33. And so the
- 14 total at the bottom there should be 116 versus
- 15 117.
- 16 Q. And with this correction, do you
- 17 declare that Exhibit 1011, your written
- 18 rebuttal testimony, is true and correct and of
- 19 your personal knowledge?
- 20 A. Yes, I do.
- 21 Q. Thank you.
- We have already talked about this a
- 23 little bit, but are you familiar with the
- 24 acronym MVPD?
- 25 A. Yes, it stands for Multi-channel Video

- 1 Programming Distributor.
- 2 Q. And would you please share with us
- 3 your understanding of that term?
- 4 A. Sure. I think of it as just more
- 5 traditional forms of distributing programming,
- 6 cable, satellite, telcos.
- 7 Q. Would you please provide us with an
- 8 overview of the competitive landscape of the
- 9 MVPD industry in the period 2010 to 2013?
- 10 A. Yeah, sure. I guess it would probably
- 11 be helpful to give a little bit of history on
- 12 the satellite business, which launched in the
- 13 mid 1990s.
- 14 And it was -- it started as more of a
- 15 rural play, kind of going after customers that
- 16 cable couldn't reach because they were the --
- 17 cable was the entrenched distributor. And so
- 18 both cable and the satellite grew for a long
- 19 period of time, 10, 15 years or so.
- 20 And so at some point in, I would say,
- 21 mid 2000s or maybe a little later, there, you
- 22 know, again, both companies were able to grow,
- 23 so both companies could bring on new
- 24 subscribers and be profitable.
- 25 And -- but as kind of the 2000s closed

- out, the marketplace just became more
- 2 saturated.
- 3 So there were fewer customers to fill
- 4 the bucket with, meaning that instead of
- 5 growing the rates that cable or satellite had
- 6 been growing the last 15 years or so, that
- 7 growth had slowed because there were just no
- 8 customers, you know, from this bucket to fill.
- 9 So, in other words, cable and
- 10 satellite were kind of starting to take each
- 11 others' customers. And so at that point the
- 12 focus, I think, has been more on growth and
- 13 acquisition of customers.
- 14 And I think it kind of, when that
- 15 saturation point hit, it became more of a
- 16 retention play for both companies, kind of
- 17 making sure your customers stayed on the
- 18 platform. That -- that was the revenue source.
- 19 Q. And during this period did management
- 20 or containment of costs play a role in your
- 21 considerations?
- 22 A. Yeah, it did. I think, you know, it
- is always a factor, but when you're not growing
- 24 at the rate that you had been growing, then
- 25 costs become an issue. And at a cable or

- 1 satellite company, programming costs were the
- 2 -- by far the biggest cost line item. So, yes,
- 3 there was more of a focus for sure.
- 4 O. And so given this goal of customer
- 5 retention that you were just telling us about,
- 6 and the overlay of cost considerations as well,
- 7 were there particular characteristics of
- 8 programming that you were particularly looking
- 9 for as someone charged with making program
- 10 decisions at DirecTV?
- 11 A. Yeah. I think that, you know, as
- this, again, focusing more on costs and then
- what was important to the customer, I think
- 14 that you looked at really marguee or must-have
- 15 type programming, that -- basically programming
- 16 that I would say that if you lost or didn't
- 17 have that you were at high risk of losing your
- 18 customer because of it.
- 19 Q. Would you please give us an example of
- 20 what you're calling must-have or marquee
- 21 programming?
- 22 A. Yeah, I think live sports is really
- 23 honestly the best example. I think that there
- 24 are certain factors that, you know, if you had
- 25 a checklist of I think what was important to

- 1 keeping a customer on the platform, I think
- 2 live sports is really a great example of that.
- I think there is, you know, multiple
- 4 factors. There is -- folks are really
- 5 passionate about sports. They are really
- 6 passionate about not just sports in general,
- 7 but their particular team.
- 8 So if you are a sports fan, you have
- 9 particular teams you follow and, you know,
- 10 you're just, I guess, yeah, you're just really
- 11 passionate about following that team or those
- 12 teams. And there is no other substitute for
- 13 that.
- So -- and, you know, just not really
- 15 -- sports isn't really available many other
- 16 places. So you take the Cubs, for instance.
- 17 And if you want to catch your Cubs game and you
- obviously are going to catch it live, it is
- 19 really only going to be on one channel.
- 20 So unlike some other types of
- 21 programming, you can't just kind of flip
- through the dial and find it somewhere else.
- 23 It's -- it's -- you know, there is other sports
- 24 out there and there is other networks out
- there, obviously, that carry sports, but if you

- want to catch that game, it's pretty much going
- 2 to be on just one channel.
- And so I think that -- and as I
- 4 mentioned, the fact that it is live is
- 5 important because I think that, you know,
- 6 people are just much more engaged in that kind
- of programming, that they have to sit down and
- 8 watch kind of day and date for when it's on.
- 9 I think sports is fairly unique in its
- 10 content. There is nothing else like it out
- 11 there.
- 12 And I quess, kind of my prior point,
- 13 too, there is really no substitution for a
- 14 particular game. If you are, again, if you are
- a Cubs fan and we weren't carrying WGNA, for
- 16 instance, or I didn't have the Yankees, I can't
- 17 go tell you to watch another team or another
- 18 sport because I just don't think -- you know,
- 19 again, there are many general sports fans, but
- if you are a true fan of a team or teams, I
- 21 can't tell you to watch another -- a different
- 22 game. It is just not going to work.
- 23 Q. Are there examples of what you're
- 24 calling must-have programming other than team
- 25 sports?

- 1 A. Yeah. I think there are certain types
- of content, like I think Game of Thrones is a
- 3 good example of, if you kind of ran back the
- 4 factors, I think it's certainly a very
- 5 passionate fan base, as you can see from social
- 6 media.
- 7 I think it is the type of programming
- 8 that people watch live or near live. I think
- 9 that it is not -- it is similar to sports in
- that, you know, you don't want a spoiler, so
- 11 you want to catch it when it's on.
- 12 I think that a network like Fox News
- is really kind of -- would fit into that
- 14 category. I think it is another -- it's a type
- of network or content that has a really
- 16 passionate fan base. Obviously, again, people
- 17 watch that live.
- 18 It's a type of network or programming
- 19 that, if I didn't have, I think I would suffer
- 20 because of it.
- 21 O. How about sitcoms, reruns of sitcoms
- or old movies, do they have these must-have
- 23 qualities that you are speaking of?
- 24 A. No. I would say no, I think, because,
- you know, again, if you kind of run through the

- 1 checklist, I don't think that it -- there is
- 2 certainly other avenues that you can find this
- 3 content on. I think there is other -- you can
- 4 find it on other channels a lot of times. You
- 5 can find it on other platforms.
- I think if -- I know I use 30 Rock as
- 7 my example in my testimony, that it was carried
- 8 on WGNA at the time, the period we're talking
- 9 about here, 2010 through 2013, and the fact
- 10 that -- it was broadcast on WGNA but it was
- 11 also on, I believe, Comedy Central at the same
- 12 time. NBC was broadcasting their initial
- 13 broadcast premiers there. And it was on
- 14 Netflix at the time as well.
- 15 So I think that, you know, this type
- of content, just because it is parsed in so
- 17 many places, I think it just -- it carries less
- 18 of a value. There is just more, more places
- 19 you can see it and there is more substitutes
- 20 for it.
- 21 O. Let's talk for a minute about the
- 22 licensing fees that you paid for programming
- outside of the compulsory license context when
- 24 you were at DirecTV.
- 25 A. Um-hum.

- 1 O. How did the licensing fees that you
- 2 paid for team sports programming compare to
- 3 licensing fees for other types of programming?
- A. Well, it was multiples. I think it's
- 5 no secret that ESPN is, I guess, I would call
- it a poster child for high sports rights fees,
- 7 and everybody kind of reads in their local
- 8 paper, when there is a dispute, how much ESPN
- 9 costs.
- 10 So if I use that as an example, I
- 11 think that, you know, I can say that if I
- 12 looked at ESPN and its license fees in any
- 13 given year, and then I guess compared it
- 14 against some, you know, networks that don't
- 15 carry sports, that would be, you know, in the
- 16 higher range of content like a USA Network or a
- 17 Disney, you would, you know, if you did the
- 18 comparison, you could see that ESPN would be
- 19 multiples, probably four-five-six-seven times
- of what those other networks would be.
- 21 Q. Have you reviewed the written
- 22 testimony of Program Suppliers' witness Sue Ann
- 23 Hamilton?
- 24 A. Yes, I have.
- 25 O. Ms. Hamilton testifies that audience

- 1 viewing is the best measure of the relative
- value of programming.
- In your experience in the industry, is
- 4 there a one-to-one correlation between audience
- 5 viewing and value?
- 6 A. No, not to my prior point. I think
- 7 that -- I think if you could -- you could look
- 8 at it one of two ways.
- 9 I think in the example that I gave
- 10 you, if you are kind of comparing ESPN to, say,
- 11 a Disney or a USA Network, those networks, I
- 12 put an example in my testimony, we looked at a
- 13 certain year and it had certain viewer --
- 14 similar viewership, all three of those
- 15 networks, and then you could just see how
- 16 wildly different the license fees were.
- 17 And, conversely, I think you could
- 18 look at networks that have similar license
- 19 fees. So they could be all bunched together
- and within a small range, but they could have
- 21 greatly different viewership numbers.
- Q. Have you reviewed the written
- 23 testimony of Dr. Mark Israel?
- 24 A. Yes, I have.
- 25 Q. I will ask Geoff to place on the

- screen Table 9 from Dr. Israel's written rebuttal testimony.
- 3 Would you please tell us what this is?
- 4 A. Yes. So this is Dr. Israel's -- I
- 5 think he called it his cable content analysis.
- And basically what he performed here
- 7 was he looked at -- basically he kind of took
- 8 the top 25 networks in terms of distribution
- 9 and then he basically kind of broke out the
- 10 expenditures that all of these top 25 networks
- 11 spent for JSC and non-JSC programming.
- 12 So you can see the line item from JSC
- programming, the expenditures line, and kind of
- 14 as a percentage of overall budget you can see
- that number of 22, almost 23 percent.
- 16 And so then, for comparison purposes,
- 17 he did this so that you could kind of see how
- 18 there really is no -- that correlation really
- isn't there because, if you look at the
- 20 household viewing hours, it represents less
- 21 than 3 percent of the Joint Sports Claimant
- 22 programming, less than 3 percent of the
- 23 overall, you know, viewing hours of all those
- 24 top 25 networks, programming hours, again,
- 25 another small number.

- But I think it just really goes to 1 2 show you that the viewership and the value or expenditures that people are spending on -- or 3 that networks are spending on this programming 4 just doesn't -- that doesn't correlate. 5 6 0. And we're now going to place on the screen Table 10 from Dr. Israel's written 7 8 rebuttal testimony. 9 Would you please tell us about this table? 10 Α. So this is a similar analysis 1.1 Sure. although he just -- he broke it down for two 12 specific networks. And I think these are 13 14 illustrative, because I think that both of these networks carry JSC and non-JSC 15 programming. So you can see, you know, CBS 16 carries Major League Baseball, among other 17 18 things, and TNT carries NBA games. 19 And so, again, you can kind of just see he took the overall programming budget for 20
- 21 both of these channels and then broke out the
- JSC programming, you know, and the non-JSC
- 23 programming.
- So you can just kind of see the
- 25 expenditures item list there in column C,

- 1 again, near 50 percent for these channels is
- what they are spending on the JSC programming.
- 3 And then if you look at the household viewing
- 4 hours or the programming hours, the percentages
- 5 are just much, much less.
- 6 Q. Are the results that you're talking
- 7 about in Dr. Israel's analysis in Tables 9 and
- 8 10 from his rebuttal testimony, are these
- 9 consistent with your experience in the
- 10 distribution industry?
- 11 A. Yes, they are.
- 12 Q. What role does audience viewing data
- 13 play in the video distribution industry?
- 14 A. I mean, certainly we looked at it. It
- is one of a number of factors that we would
- 16 look at when we were kind of commencing
- 17 negotiation.
- 18 Personally I would look at it. I
- 19 would do basically an analysis of the last
- 20 several years. If the channel is coming up for
- 21 renewal, it was just kind of more of a
- benchmark to see how it had performed, whether
- 23 ratings had kind of been generally going up or
- 24 generally going down.
- 25 But it was definitely not a

determinative factor in -- in negotiations. 1 And certainly when it came to the 11th hour, 2 the focus was much more on how important was 3 that particular type of programming that 4 channel had versus what its ratings were. 5 And, you know, it is clearly they are 6 used for ad sales purposes. You could look at 7 a TBS or a TNT and they certainly bring in a 8 decent amount of their revenue from advertising 9 10 sales. 11 And so ratings are important to the 12 networks themselves. But MVPDs don't really -the amount of advertising time we get and the 13 14 amount we sell is just not a big revenue item So that doesn't really factor in. 15 for us. It's not -- really in normal 16 experience, I never remember it being part of a 17 contract, so it was never -- ratings were never 18 kind of part of a rate sheet that said, well, 19 if your ratings go up on this network, then 20 your rate goes up and, vice versa, if your 21 ratings go down, your rate goes down. 22 It was not ever in the representations 23

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and warranties or breaches, so just, again, it

was a factor we looked at, but, again, when

24

- 1 push came to shove in making a decision or, you
- 2 know, negotiating the contract, it didn't fit
- 3 in there.
- And we did not, certainly when I was
- 5 -- when the station group was reporting it to
- 6 me, we did not use ratings for evaluating
- 7 distant networks.
- 8 Q. Thank you.
- 9 I'd like to now discuss for a few
- 10 minutes DirecTV's carriage of distant signals.
- 11 Did DirecTV carry WGNA during the
- 12 period 2010 to 2013?
- 13 A. Yes, it did.
- 14 Q. Do you know how much of DirecTV's
- 15 spending for Section 119 royalties were paid
- 16 for retransmitting WGNA?
- 17 A. Yeah, on average it was about
- 18 75 percent of the amount that we paid into the
- 19 copyright tribunal was for carriage of WGNA.
- Q. Why did DirecTV carry WGNA?
- 21 A. It was definitely because of the live
- 22 sports. It was -- we saw real value in, you
- 23 know, there was, I think, 100 or so games. We
- 24 saw real value in the Cubs, the Bulls, and the
- 25 White Sox.

- 1 And I think that they not only serve,
- 2 you know, certainly look at a team like the
- 3 Cubs, which has a national following, they
- 4 certainly, you know, have a following
- 5 nationwide.
- And so it serves a particular fan base
- 7 in that respect. But also just having national
- 8 games is important. You know, a lot of -- you
- 9 have a lot of networks out there, MLB or ESPN,
- 10 that carry nationally-televised games and
- 11 sports fans, you know, it's -- it's -- when
- 12 sports fans are looking for something, even if
- 13 you are not a particular fan of that maybe
- team, you're going to want to watch sports. So
- 15 it was valuable to us.
- 16 Q. Did you place value on the syndicated
- 17 sitcoms and movie reruns on WGNA?
- 18 A. Not really. I don't think that at the
- 19 time I probably, when I was negotiating our
- 20 deal, I think I may have known what, you know,
- 21 had a general idea of what else was on other
- 22 than the Cubs games, but -- and then the White
- 23 Sox and Bulls, but I think that it wasn't -- it
- 24 wasn't a -- I wouldn't have really put a lot of
- 25 value on that, I guess.

1	I think that, you know and just
2	getting back to the ratings, I think you could
3	say that, you know, a show like 30 Rock or a
4	Saturday night movie may have decent ratings,
5	and they may have done, you know, fairly well
6	on a network like WGNA.
7	But I think that, again, you go back
8	to what's really important, what I consider
9	important to the customer.
10	And so even though a show may have
11	decent ratings, I think in the examples of a 30
12	Rock a sitcom or a movie, people aren't
13	sitting down to watch, I don't think, that
14	particular show day and day. I don't think
15	someone is sitting down every night to watch
16	Seinfeld or 30 Rock at a certain time.
17	So I think that, you know, again, it's
18	kind of fungible, that if I were to have to
19	drop WGNA, I would have a much harder time
20	telling the subscriber to find their sports
21	content elsewhere, where I wouldn't have as
22	difficult a time telling that subscriber where
23	to find the more general entertainment sitcom
24	and movie-type programming. There are lots of
25	other places for them.

1	Q. Did you negotiate a carriage agreement				
2	with WGNA during the period 2010 to 2013?				
3	A. Yes, I did.				
4	JUDGE BARNETT: Before we go there, it				
5	is time to stop for the day. So we will be at				
6	recess until 9:00 o'clock in the morning.				
7	(Whereupon, at 4:40 p.m., the hearing				
8	recessed, to reconvene at 9:00 a.m. on Tuesday, March				
9	13, 2018.)				
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5	By Mr. Cho		2876			
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11	By Mr. Canto	3132				
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13	By Mr. Canton	3136				
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1	CERTIFICATE
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3	I certify that the foregoing is a true and
4	accurate transcript, to the best of my skill and
5	ability, from my stenographic notes of this
6	proceeding.
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10	Date Signature of the Court Reporter
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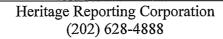
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